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Generational differences in perception of incentives in Germany

Evidence from the German Socio-Economic Panel on Generation Y

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Abstract

Recent popular and academic literature has often pointed out that Generation Y is different to other generations in work-related issues. Especially the topic rewards and recognition is an interesting area of work-related generational research that has not yet been much explored. Further, only few studies have succeeded in using rich methodological approaches that are able to detangle generation-effects from age- and period-effects and thereby finding valuable results. Also, most studies have been conducted in North America, so that a lack of intercultural comparability has been identified. Therefore, there is a dearth in literature on how Generation Y is actually different from other generations from reliable sources. This master thesis puts to the test, whether Generation Y in Germany has different perceptions of incentives compared to Generation X. For this purpose time-lag data as well as cross-sectional data is obtained from the German Socio-Economic Panel from the years 2002, 2015 and 2016 to test the research question. The results reveal generational differences in the perception of incentives to some extent. Is has been found that Generation Y is more satisfied with their job, less interested in monetary incentives, more interested in working less hours (taking into account the reduction of salary) and reacts with a stronger increase in satisfaction with the job when receiving a performance assessment compared to the precursory Generation X. Based on these results a first hint for practitioners can be given on how to design incentive schemes for Millennials in Germany. Further in-depth research on incentive preferences, conducted in time-lag or longitudinal set-ups is still needed to verify these results.

Keywords generational differences, Generation Y, Millennials, Generation X, work attitudes, incentives, SOEP

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List of Abbreviations

p	-	probability-value
SD	-	standard deviation
N	-	population size
SOEP	-	Socio-Economic Panel
DIW	-	Deutsches Institut für Wirtschaftsforschung (German Institute for Economic Research)

1 Introduction

1.1 Background, topic and significance

Today three Generations are part of the working population in Germany (aged 18-65 years[1]): Baby Boomers, Generation X and the newest member Generation Y. The exploration of work-related generational differences has already started to be a topic of interest for some time now (e.g. Kupperschmidt, 2000; Rhodes, 1983; Smola and Sutton, 2002; mostly focusing on Baby Boomers and Generation X), as it has been understood that each generation can have different value systems and work demands, and therefore reacts differently to events in work life (Kupperschmidt, 2000, p. 65). Increasing attention has been put on how to work with and manage members of different generational cohorts in the workplace by human research specialists, managers, and researchers (Cennamo and Gardner, 2008, p. 891) and according to Breitsohl and Ruhle (2012, p. 110) "there is a rapidly growing body of research aiming to identify differences between generations of workforce members". The importance of exploring generational differences is also supported by a study of the Society for Human Resource Management (2004) which found that 58% of Human Resource professionals stated that conflicts among employees due to "generational" differences were observed. Various kinds of evidence on generational differences can easily be found, but often this evidence is anecdotal, not open to critical peer review, generalized or conducted with poor methodological approaches (Macky, Gardner, and Forsyth, 2008, p. 857). One of the biggest difficulties in generational research is the detangling of generation-, age- and period-effects (Parry and Urwin, 2011; Rhodes, 1983). Some studies using rich methodological approaches like time-lag data manage to overcome this challenge and do find significant and valuable results (e.g., Breitsohl and Ruhle, 2012; Kowske, Rasch, and Wiley, 2010; Smola and Sutton, 2002; Twenge et al., 2010), but this research is rare. Therefore, conducting more methodologically strong research to gain a deeper understand-

[1] Like in the study by Breitsohl and Ruhle (2012, p. 115) the focus will lie on respondents who had already entered the workforce and therefore Generation Y members younger than 18 years will not be taken into account. Based on the German retirement age the maximal age that is taken into account is 65 years: https://www.juraforum.de/ratgeber/rentenversicherung/renteneintrittsalter-in-deutschland-welches-gesetzliche-rentenalter-gilt

ing of generational differences, and based on this, being able to give practical advice on effective employee management, is needed (Breitsohl and Ruhle, 2012, p. 127).

Generation Y has only recently started to enter the workforce, but the number is steadily growing, as also the younger members of this generation are reaching working age. According to Statista (2017), in 2016 already 49,6% of all German Generation Y members (aged 17-35 years in 2017) were fully employed, making the aim to understand this new cohort increasingly important to researchers and managers. A white paper by Oliver Wyman, Orange, and Mercer (2016) states that by 2020 Generation Y will represent approximately half of the workforce, and by 2025 even three quarters of the workforce worldwide. Therefore, latest popular and academic literature on work-related generational differences has been focusing especially on the need to work with, engage, and manage this new generation (e.g. Parry and Urwin, 2011, p. 79; Pyöriä et al., 2017, p. 1). They are expected to bring new attitudes, work behaviors, values and expectations as well as challenges with them, making their exploration a considerable topic of interest for researchers today (Breitsohl and Ruhle, 2012, p. 107; Hershatter and Epstein, 2010, p. 211; Treuren and Anderson, 2010, p. 49-50). Among this literature, the perception that differences in work values and beliefs of employees from different generations exist and need to be addressed to overcome misunderstandings, miscommunication and conflicts, is often prominent (Wong et al., 2008, p. 879). Therefore, a growing concern on how Generation Y's behaviours and attitudes will affect other organizational members, how they want to be motivated and how they will become organizational members and commit to a company, can be identified (Myers and Sadaghiani, 2010, p. 225). This concern is also pushed by the popular belief of older generations, that younger generations are fundamentally different to themselves, even though they might have behaved similarly when they were younger. A study by Deal, Altman, and Rogelberg, (2010, p. 192) for example found that older generations believed that the younger generation possesses new attitudes that makes it for example difficult to interact with them, even though similar attitudes were observed within their own generation when they were the same age as Generation Y members now. Thus, a growing body of research is being conducted to explore generational work values, expectations and motivations, but so far little is known on how Generation Y is actually different from other gener-

ations, especially concerning their work attitudes (Breitsohl and Ruhle, 2012, p. 107; Treuren and Anderson, 2010, p. 50).

Most research on generational differences of Generation Y has been conducted in North America (Parry and Urwin, 2011, p. 90), whereas almost none is known about this generation in Germany. The lack of research focusing on Generation Y in other geographical areas (e.g. Europe, Africa or Middle East) hinders the comparability and generalizations of the results (Breitsohl and Ruhle, 2012, p. 107). A study by Breitsohl and Ruhle (2012) has started to focus on generational differences in Germany as one of the first and has found some initial differences between Generation Y and Generation X. The authors report that Generation Y in Germany is more satisfied with their income – independent from its amount – and that they have a more positive outlook in terms of expected future life satisfaction (Breitsohl and Ruhle, 2012, p. 117-121). To date this is the only German study focusing on Generation Y's work-related differences to other generations that has been found within the literature review for this thesis. Likewise, there is still a lot to learn about country specific differences in generational issues, especially concerning Generation Y in Germany (Breitsohl and Ruhle, 2012, p. 107).

Further, when looking at more specific fields of work-related generational differences, little is known about incentive preferences of different generations, even though rewards and recognition is often mentioned in popular and academic literature in connection to generational differences in work values and motivational drivers (e.g. Beekman, 2011, p. 16; Cogin, 2012, p. 2288; Kowske, Rasch, and Wiley, 2010, p. 276; Treuren and Anderson, 2010, p. 51). First evidence for between-generational differences in this direction can be found. A study by Rawlins, Indvik, and Johnson (2008), as one of few, invested the claim that Generation Y does not seem to be motivated by or interested in the same rewards as previous generations and found that less than 10% of their respondents found performance-based rewards essential in accepting a job (Rawlins, Indvik, and Johnson, 2008, p. 3). But the results of this study are limited in its generalizability as it was conducted with junior and senior level students that were not part of the working population yet. Further this study relied on data from one point in time so that age-effects were not con-

trolled for. Therefore, a lack of knowledge on differences between Generation Y's and other generation's incentive preferences can still be identified. Also, other studies have suggested further research focusing on what kind of rewards will motivate Generation Y and affect their decision to stay with an organization (e.g., Ng, Schweitzer, and Lyons, 2010, p. 290; Pregnolato et al., 2017, p. 9). Ng, Schweitzer, and Lyons (2010) for example observed millennial university students in Canada and found that individualistic aspects of a job, like development opportunities and rewards are of very high importance to this generation. They suggest that investigating what kind of compensation and benefit packages will be valuable for Generation Y members is a promising research topic (Ng, Schweitzer, and Lyons, 2010, p. 290). Therefore, within this thesis the focus will lie on studying work-related generational differences in the perception of incentive preferences with the focal point on German members of Generation Y.

1.2 Research objective and questions

Looking at the current research on generational differences, a lack of studies exploring generational differences in Germany and the missing knowledge on generational differences in incentive preferences can be identified. Therefore, the research objective of this thesis is to deep-dive into work-related generational differences and to identify differences in the perception of incentives between Generation X and Y in Germany. The selection of these two generations is based on the fact, that they represent largest parts of the German workforce today and will also do so in the near future (Statista, 2017). The Baby Boomer Generation will soon dissipate from the workforce completely, as they are reaching retirement age, whereas Generation Z, the following generation, has only started to reach working age in 2018[2]. The underlying research questions which will be deduced within the literature review and picked up in the hypothesis development are, firstly, whether Generation X and Y differ in satisfaction levels of their income and job; secondly, whether the two generations are influenced differently by different kinds of rewards; and thirdly, whether their job satisfaction levels are affected differently by performance assessments.

[2] Employment statistics: "Structural data on employees subject to social insurance contributions at the place of their employment on 30th June 2017", Federal Statistical Office of Germany: https://www.destatis.de/EN/FactsFigures/NationalEconomyEnvironment/LabourMarket/Employment/TablesEmploymentStatistics/AgeGroups.html

To answer these research questions data from the German Socio-Economic Panel (SOEP) is used. The analysis will be based on survey responses concerning job and income satisfaction levels, as well as more detailed questions linked to incentives. To be able to compare different generations at the same age, the data that will be analysed is in parts taken from different years of the panel. Due to the fact that not all questions were asked in every year of the panel, the analysis will be split into two parts: for three of the hypotheses time-lag data from two years (2002 and 2015) will be used to compare the responses of different participants of similar age (21-33 years) at different points in time, to reach both generations and rule out age-effects. For a last hypothesis, focusing on a more in depth question on incentives that was only asked in 2016, cross-sectional data from that year will be used to compare responses of the two generations at different ages with Generation X at ages 35-51 years and Generation Y at ages 18-34 years[3] in 2016 (more information on the methodology in chapter 3).

1.3 Structure of the thesis

This thesis aims at exploring generational differences in the perception of incentives in Germany. In chapter two a literature review will be conducted by focussing on the definitions of generations and generational differences in general, as well as by looking at work-related generational differences and deep-diving into the specific area of generational differences in incentive preferences. Chapter three will then describe the research design and method of using data from the SOEP, also including the methodology for the statistical analysis of the panel data. This will be followed by the display, interpretation and discussion of the results in chapter four. The thesis ends with a conclusion including managerial implications, limitations and an outlook for future research in chapter five.

[3] Like in the study by Breitsohl & Ruhle (2012, p. 115) the focus will lie on respondents who had already entered the workforce (exclusion of Generation Y members younger than 18 years).

2 Literature Review

2.1 Generations

In their book "Generations" (1991), Howe and Strauss define the generational phenomenon, based on the American society: "A Generation is a cohort-group whose length approximates the span of a phase of life and whose boundaries are fixed by peer personality" (Howe and Strauss, 1991, p. 60). These phases of life are split up into four: Youth (age 0-21), Rising Adulthood (age 22-43), Midlife (age 44-65) and Elderhood (age 66-87). They are defined in terms of central social roles in a lifetime and comprise the span in which beliefs and behaviors of an individual are formed. Prior research has found the formation of personal traits to be strongest within the childhood and adolescence (Twenge et al., 2010, p. 1120). The mentioned boundaries for generations, which are drawn by year of birth, can be imprecise and often vary across researchers and studies. But as Howe and Strauss put it, like defining the boundary between Catholics and Protestants or rich and poor, the boundaries between Generations can be defined based on the peer personality (Howe and Strauss, 1991, p. 59). Peer personality is a caricature of a prototype member and is recognized by common age and location, common beliefs and behavior and perceived membership in a common generation (Howe and Strauss, 1991, p. 63-64).

Based on the definition by Howe and Strauss, Kupperschmidt (2000, p. 66) sums up a generational cohort being "an identifiable group that shares birth years, age, location and significant life events at critical development stages". The sharing of historical and social life experience is an essential part of the development of a generational cohort and its peer personality or characteristics (Wong et al., 2008, p. 879). Therefore, members of the same generation on the one hand most probably go to school, start working, have children and retire at the same points in time and on the other hand are also nearly the same age when wars occur, technological advances impact or even disrupt the economy and other social changes are made (Kowske, Rasch, and Wiley, 2010, p. 266). Thus, also forces from the outside like parents, media and social events are part of making one generation different from other generations, as these forces effect the creation of common value systems for the peers of the same age (Twenge et al., 2010, p. 1120). This leads to a sharing of experiences at key developmental points, which contribute to the unique characteristics (e.g., values,

attitudes, personality) that define and differentiate one generation from another (Kowske, Rasch, and Wiley, 2010, p. 266). These characteristics can impact the generational members' personalities, their feelings towards authority, their values and beliefs about organizations, their work ethic, as well as why and how they work. They can also influence generational members' goals and aspirations in their work life (Kupperschmidt, 2000, p. 364). The definition of generations used for this research needs to be differentiated from familial generations in the sense of grandparents, parents, and children in one family (Kowske, Rasch, and Wiley, 2010, p. 266). When using the familial generation definition, there is a chance that a generation by the definition of the generational research of this thesis could be skipped (e.g., parents are part of the Baby Boomer generation and their children are part of Generation Y, so Generation X would be skipped in this exemplary family).

The following definitions of generations and especially the clustering of the different cohorts into birth years is highly based on the US-American classification, as a consistent scientific classification for Germany has not yet been established (Bruch, Kunze, and Böhm, 2010, p. 94). In a book by Bruch, Kunze, and Böhm (2010, p. 95) the authors come up with a cross-cultural comparable clustering, in which the birth years and the description of especially the two most important generations of this thesis (Generation X and Y) are clustered in the same time periods and are based on similar characteristics as stated below. Also between different American studies some variance of the exact birth years for when a generation begins and when it ends can be found, but independent of the different years named, the basis for all clustering lies on the belief that the members share different sets of attitudes, values and beliefs (Parry and Urwin, 2011). The ranges used in the definitions below are based on a review of different studies and rely on the most prominent clustering that can be found in generational research. Therefore, it might deviate from some other studies that can be found.

2.1.1 Baby Boomer characteristics

The oldest generation in today's workforce in Germany is the Baby Boomer Generation. They were born between 1945 and 1964 (Wong et al., 2008, p. 879) and were therefore affected and influenced by the Vietnam War and civil rights and women's movement in

their adolescence and young adulthood (Twenge et al., 2010, p. 1120). Due to their age, they have already started to enter retirement, are therefore decreasing in number, and will most likely completely dissipate from the German workforce by 2031[4]. They highly value on-job security and stable working environments. Further, it has been found that they are most likely to remain loyal and attached to one organization, being characterized as workaholics (Kupperschmidt, 2000, p. 68; Wong et al., 2008, p. 879). In return they highly value organizational structures with promotions, titles, corner offices and reserved parking spaces (Kupperschmidt, 2000, p. 68). According to Kupperschmidt (2000, p. 68) they also highly value rewards and recognition and believe to deserve them for their work.

2.1.2 Generation X characteristics

The following Generation is called Generation X and will be one of the focus generations of this thesis. Members of this generation were born between 1965 and 1981 (Twenge et al., 2010, p. 1120; Wong, et al., 2008, p. 879). In their youth and early adulthood Generation X experienced the aids epidemic, economic uncertainty and the fall of the Soviet Union. Members of this generation also experienced financial, family and social insecurity while growing up (Smola and Sutton, 2002, p. 365). Compared to any earlier generation, they have had a considerably higher chance of having seen their parents' divorce or job loss due to down-sizing (Kupperschmidt, 2000, p. 69; Twenge et al., 2010, p. 1120). These circumstances make them seem more independent and contrary to Baby Boomers, less committed to their employing organization with a hesitance to long-term relationships (Kupperschmidt, 2000, p. 69; Twenge et al., 2010, p. 1120). They have also found to be cynical, pessimistic, individualistic (Kupperschmidt, 2000, p. 68-69; Smola and Sutton, 2002, p. 365) and were the first to value strong work-life balance and expect work to be fun (Kupperschmidt, 2000, p. 70). Like Baby Boomers, they are also perceived to highly value rewards and recognition, but contrary to the older generation demand them as a prerequisite (Kupperschmidt, 2000, p. 67). Being the first to use computers, it is said that they are used to receiving immediate feedback (Smola and Sutton, 2002, p. 365).

[4] Based on the German retirement age: https://www.juraforum.de/ratgeber/rentenversicherung/renteneintrittsalter-in-deutschland-welches-gesetzliche-rentenalter-gilt

2.1.3 Generation Y characteristics

Born between 1982 and 2000, Generation Y was the newest generation in the workforce in 2016 (the latest year of data used in this thesis) and will be the focal point of this thesis. In 2016 Generation Y members were aged 16-34 years (Parry and Urwin, 2011, p. 80; Twenge, 2010, p. 201; Wong et al., 2008, p. 879). They are the first to be born into a wired world, being 'digital natives' and connected 24/7 (Martin, 2005, p. 41; Smola and Sutton, 2002, p. 365; Westerman and Yamamura, 2006, p. 152). They further share the experience of the fall of the Berlin Wall, 9/11 terrorist attacks, more frequent natural disasters, as well as having seen their parents being downsized and laid off (Cogin, 2012, p. 2272-2278; Barford and Hester, 2011, p. 67). Compared to their predecessors, Generation Y is seen to be the most educated generation, giving them the power to negotiate the terms under which they want to be employed (Ng, Schweitzer, and Lyons, 2010, p. 282). They are observed as team-oriented, confident, with higher self-esteem as previous generations and full of promise (Kowske, Rasch, and Wiley, 2010, p. 266; Twenge and Campbell, 2008, p. 864), but empirical research also found them to be narcissistic (Twenge and Campbell, 2008, p. 864) and popular literature describes them as being of high maintenance and wanting everything now (Martin, 2005, p. 43; Moritz, 2014, p. 42). Exemplified through their predecessors, Millennials highly value work-life balance at every stage of their career (Cennamo and Gardner, 2008, p. 902-903; Hershatter and Epstein, 2010, p. 219; Ng, Schweitzer, and Lyons, 2010, p. 282). This Generation is also known as Millennials, Nexters, Generation www, the Digital Generation, Generation E, Echo Boomers or N-Gens and even have further other names for themselves (Martin, 2005, p. 40). In the following 'Generation Y' and 'Millennials' will be used interchangeably.

2.1.4 Generation Z characteristics

Within this thesis, Generation Z will not be a central theme, nor will most of the discussed research include any information on this generation, as research on Generation Z is quite a new field of interest (Bencsik, Horváth-Csikós, and Juhász, 2016, p. 103). But, to create a holistic picture and give a short outlook on the generation following Generation Y, also a brief outline of Generation Z is included. So far mostly popular literature with anecdotal evidence concerning Generation Z and its characteristics can be found. An exact range of

birth years for this cohort is not yet defined: a range for starting birth years spans from the mid-1990s to early 2000s[5] and for ending birth years from the late 2000s to early 2010s (e.g. Bencsik, Horváth-Csikós, and Juhász, 2016; Bresman and Rao, 2017; Southgate, 2017). Building on the definition for Generation Y used in this thesis, the starting year for Generation Z would be 2001. Generation Z's childhood and adolescence, in which most members still stand, has been accompanied by a growing income gap and a shrinking middle class (Turner, 2015, p. 104). Like Generation Y, they are born into a wired world and are known to be virtually online non-stop, even more than their precursory generation (Bencsik, Horváth-Csikós, and Juhász, 2016, p. 93; Turner, 2015, p. 104). Growing up in an uncertain and complex environment, they have found not to be afraid of continuous change (Bencsik, Horváth-Csikós, and Juhász, 2016, p. 93). As for their career ambition, Generation Z is expected to choose careers of their own interest rather than wanting to meet external demands (Bencsik, Horváth-Csikós, and Juhász, 2016, p. 94). They are also known as iGeneration or digital natives (Turner, 2015, p. 104).

2.2 Work-related generational differences

A prominent assumption and research conclusion concerning generational differences in the workplace is that when the differences are not understood, tensions can increase and job satisfaction and productivity can decrease (Kupperschmidt, 2000, p. 65). Therefore, it is often recommended to managers to address generational differences head-on, to find out what different cohorts are looking for in a job, what makes work rewarding to them and what organizational factors attract and retain multigenerational employees (Kupperschmidt, 2000, p. 71). This has made generational research a topic of interest for researchers today and there is a growing number of studies exploring this field (Breitsohl and Ruhle, 2012, p. 110; Cennamo and Gardner, 2008, p. 891).

Thus, many different opinions on who Millennials really are, what is valuable to them and how they will develop in the next years can be found (Deal, Altman, and Rogelberg, 2010,

[5] This could mean that Generation Y's ending birth year might be adapted according to the development of generational definitions in the future. But for the time being, the clustering of Generation Y will be used based on the existing literature as stated in 2.1.3.

p. 191). Popular beliefs and perceptions, published in newspapers, magazines or discussed among workplace colleagues, often radicalize that Millennials are very different from other generations at the same age (Deal, Altman, and Rogelberg, 2010, p. 191-192). Popular press even pushes these differences with words like 'collide' and 'clash', to heat up the discussion (Kowske, Rasch, and Wiley, 2010, p. 276). But, whether this is actually true, still needs to be explored. Therefore researchers try to prove or rebut these believes, by conducting empirical studies exploring possible generational differences in work-related issues (e.g., Breitsohl and Ruhle, 2012; Cennamo and Gardner, 2008; Kowske et al., 2010; Ng, Schweitzer, and Lyons, 2010; Pregnolato et al., 2017; Smola and Sutton, 2000; Twenge et al., 2010; Wong et al., 2008). The focus on what work-related differences are explored, varies from workplace values, over workplace attitudes to motivational drivers (e.g., Cennamo and Garnder, 2008; Cogin, 2012; Kowske, Rasch, and Wiley, 2010; Parry and Urwin, 2011; Wong et al., 2008) and some studies also go into more detail like exploring career expectations (e.g. Ng, Schweitzer, and Lyons, 2010) or what makes different generations stay with an employer (e.g. Hausknecht, Rodda, and Howard, 2009). Widening the field of work-related generational research, this thesis aims at understanding the specific aspect of differences in incentive preferences of different generation, thereby especially focusing on understanding Millennials in Germany.

2.2.1 Research overview

As stated above, research and management literature focussed on finding differences between workforce members of different generations has been increasing quickly recently (Breitsohl and Ruhle, 2012, p. 110). Therefore, many different types of studies examining these differences can be found. Which generations a study includes, depends on the focus and scope of the research. Typically, research on generational differences covers one to four generations (Howe and Strauss, 1991, p. 60). Studies also differ in the focus on which kind of work-related issues are examined, what methodological approaches are used and from which country the datasets are taken (for an overview please see table 9 in the appendix). Most often work-related generational research has focused on work values, rather than on specific aspects concerning the workplace (Wong et al., 2008, p. 880). Often the different studies deliver mixed results or are unable to predict true differences in work val-

ues or behaviors (Parry and Urwin, 2011). Cennamo and Gardner (2008) for example conducted a cross-sectional study to explore differences in work values, job satisfaction, commitment and intention to leave by using an online questionnaire with employees ranging from Baby Boomers to Generation Y from New Zealand. They found that Generation Y placed more importance on status and freedom values than Baby Boomers, but due to the cross-sectional methodology they are unable to detangle age-effects (like career stage or life stage) from generational-effects (Cennamo and Gardner, 2008, p. 903) (more information on the obstacles of generational research in 3.1). Therefore, the use of their findings to understand true generational differences is limited.

Parry and Urwin (2011) conducted a critical review on the empirical evidence of studies exploring generational differences in work values and found that the evidence is often mixed and most studies, as the study stated above, fail to distinguish between generation- and age-effects (Parry and Urwin, 2011, p. 93). This is also supported by Deal, Altman, and Rogelberg (2010, p. 191), who found that empirical research on Millennials is often contradictory and sometimes even confusing. They suggest that the only way to reveal if the anticipated generational differences are actually true is to conduct large-scale prospective studies over decades to actually reveal generation-effects (Deal, Altman, and Rogelberg, 2010, p. 198). Rhodes (1983) defines generation-effects (or cohort effects) as caused solely by past experiences and characteristics of a cohort of individuals. Whereas age-effects reflect individual maturation through psychological and biological development and period-effects are caused by environmental change and can affect all generations (Rhodes, 1983, p. 329-330). This can be a variation due to historical events that occur at a specific point in time (e.g., war or technological advances) (Kowske, Rasch, and Wiley, 2010, p. 269).

There are three typical approaches to identify developmental and generational change and hereby spot generation-effects: cross-sectional, time-lag and longitudinal studies. Cross-sectional studies examine participants of different ages at one point in time, time-lag studies examine different participants of similar age at different points in time, and longitudinal studies examine the same participants as they age at different points in time. The latter are

seen to be most promising in finding true generational differences (Salkind, 2010, p. 1517). Time-lag and longitudinal data, compared to cross-sectional data can overcome some of the obstacles that are involved in generational research (see 3.1). Only few studies succeed in detangling generation-, age- and time-effects from another by e.g. using time-lag or longitudinal data. Thus, within this general research overview, the main focus will lie on four studies that have used time-lag data or longitudinal data to effectively control for age-effects while exploring generational differences (for further studies see table 9 in the appendix).

In the following the four studies using time-lag or longitudinal data will be discussed. The first time-lag study focusing on work-related differences between generations that are currently in the workforce that has been found within the literature research for this thesis and covers generations that will also be covered in the analysis of this thesis, was conducted by Smola and Sutton (2002). The researchers compared data from two independent surveys from 1974 and 1999 both answered by American workers focusing on differences in work values. Due to low response rates of other generations, their study only focusses on Baby Boomers and Generation X (Smola and Sutton, 2002, p. 369-371). They found that generational work values do differ: for example, that Generation X compared to Baby Boomers values early promotions more, is more me-oriented and less loyal to the company, with a higher intention to quit the job if they won a large amount of money; they also found that Generation X associates working hard with one's own worth more than Boomers do (Smola and Sutton, 2002, p. 378). With the given data, the authors conclude that there is a trend that younger workers shift from being a 'company man' to the perception that work is given a lower priority (lower work-centrality) (Smola and Sutton, 2002, p. 379). Overall, the authors highlight that their study strongly suggests that work values are more influenced by generational experiences than by age and maturation (Smola and Sutton, 2002, p. 379). However, the authors used a survey from a different author from 1974 to compare it with their own survey from 1999. Therefore, the used data consists of two different samples of respondents and some of the comparison data was not available. This limits the results, as differences could have been caused by the different approaches in the two years (Parry and Urwin, 2010, p. 88).

A second study by Twenge at al. (2010) also used time-lag data from three years (1976, 1991 and 2006) of a yearly nationally representative survey of American high school students to identify differences in work values of Baby Boomers, Generation X and Generation Y in the United States. They were able to isolate generation-effects from age-effects effectively and like Smola and Sutton (2002) found that work centrality declined as the desire for work-life balance and leisure time increased for Generation X and Y (Twenge et al., 2010, p. 1133-1134). The study also revealed that Generation Y valued extrinsic rewards more than Boomers did (Twenge et al., 2010, p. 1134). A possible limitation is that the data was obtained from high school students that were not part of the workforce yet (Breitsohl and Ruhle, 2012, p. 109).

In a third study by Kowske, Rasch, and Wiley (2010) survey time-lag data was collected from American employees from multiple generations spanning over many years. The authors examined the effect of generation on work attitudes and how Generation Y's work attitudes differed from older generations (Kowske, Rasch, and Wiley, 2010, p. 269). Even though the effect sizes were small, the authors also found that work attitudes differed among the generations examined after controlling for age- and period-effects (Kowske, Rasch, and Wiley, 2010, p. 274). Higher company and job satisfaction, as well as higher satisfaction with job security, recognition and career development was found for Generation Y compared to the older generations. Satisfaction with pay, benefits and the work itself, did not differ significantly across the generations (Kowske, Rasch, and Wiley, 2010, p. 275-276).

A fourth study extending the research on generational differences in work-related issues by using time-lag data was conducted by Breitsohl and Ruhle (2012). Their study focused on differences in (work-related) attitudes, in particular satisfaction and insecurity, between Generation X and Y in Germany (Breitsohl and Ruhle, 2012, p. 107). The authors used data from the German Socio-Economic Panel and found that German Millennials are more satisfied with their income than Generation X (independent from the actual amount) and that Generation Y has a more positive outlook on future life satisfaction. Further they did

not find differences in job satisfaction, leisure time satisfaction, current life satisfaction and economic and job insecurity across the two generations (Breitsohl and Ruhle, 2012, p. 108).

Overall the above stated studies used rich methodological approaches to find actual generational differences that are detangled from age-effects. Compared to many studies using a cross-sectional design that don't find generational differences (e.g. Treuren and Anderson, 2010; Wong et al. 2008) all studies using a time-lag design as stated above do find significant differences between the generations observed. Smola and Sutton (2002, p. 379) even highlight that their results strongly suggest that work values are more influenced by generational experience than by age and maturation. These results make it promising to conduct further, more specific research in work-related generational differences by using time-lag designs.

Looking at these four studies, apart from one, all studies were conducted in the United States of America. Only Breitsohl and Ruhle (2012) have used data from Germany. Also, most other studies on generational research (see table 9 in the appendix) have focused on the North American population, whereas research conducted in other parts of the world (e.g. Europa, Africa or Asia) is rare (Breitsohl and Ruhle, 2012, p. 107; Parry and Urwin, 2011, p. 90;). As pointed out previously, for generational research intercultural comparability can be problematic. Most studies conducted in North America even state that one of the major limitations of their studies is the limited generalizability as the findings do not extend to other countries or cultures (e.g. Koswke, Rasch, and Wiley, 2010, p. 277; Ng, Schweitzer, Lyons 2010, p. 29). Thus, it is also promising to extend research on generational differences in work-related issues to other geographical areas besides North America.

2.2.2 Generational differences in incentive preferences

So far, little is known about incentive preferences of different generations. Most research, like the studies stated above and those summarized in the appendix rather focus on broader work-related differences like differences in work behaviours, work attitudes, motivation or

satisfaction levels, but nothing is known in specific about what different generations prefer as incentives at work. Incentive preferences as a specific area of work-related generational differences, has not yet been much explored. But, not only have other academic studies suggested to conduct further research in what kind of compensation and benefits package Generation Y will be interested in (e.g. Ng, Schweitzer, and Lyons, 2010, p. 290), also has practitioner research highlighted that the differences in work values between generations will influence the requirements for rewards and working arrangements (Parry and Urwin, 2011). And, further beyond these research suggestions, a variety of other reasons can be found why it can be interesting to conduct research on Generation Y's incentive preferences which will be outlined in the following.

One aspect of generational differences that has been reported in popular press is that Generation Y is expected to stay with an employer for a shorter period of time than older generations (Kuhl, 2014, p. 30; McKitrick, 2017, p. 12). Also, empirical research has found that Generation Y has an increased intention to quit the job compared to Baby Boomers and Generation X (Cennamo and Gardner, 2008, p. 903). Working on retention strategies for Generation Y and with that, making e.g. a two-year employee into a five-year employee can therefore be an important aspect for HR specialists and management (Kuhl, 2014, p. 30; McKitrick, 2017, p. 12). According to Hausknecht, Rodda, and Howard (2009) incentives like extrinsic rewards and advancement opportunities can be part of a retention strategy and with that can be a reason for employees to stay in a company, making it interesting to conduct research in incentive preferences of Generation Y to retain them in the workplace.

Further, Generation Y is known by HR specialists for not only being used to immediate and frequent feedback (like Generation X) but even for craving it (Beekman, 2011, p. 16; Moritz, 2014, p. 42). It has also been reported that they prefer real-time feedback over traditional performance reviews (Kuhl, 2014, p. 29). A study by Universum (2014, p. 71-72) found that 50% of European Millennials found feedback to be very important with also 50% stating they wish to receive feedback once a week. This can also be a hint on different

preferences of Millennials on the type of incentive scheme they would feel most satisfied with.

As stated in the rich methodological studies described above, it has also been found that work-centrality for Generation Y has declined, as the desire for work flexibility, as well as leisure and family time has increased significantly (Pyöriä et al, 2017; Twenge et al., 2010, p. 203). This is expressed amongst others by a higher value of work-life balance (Barford and Hester, 2011, p. 76; Cennamo and Gardner, 2008, p. 902-903; Cogin, 2012, p. 2288; Hershatter and Epstein, 2010, p. 219; Kuhl, 2014, p. 28; Myers and Sadaghiani, 2010, p. 228; Pregnolato et al, 2017, p. 8), the interest in sabbaticals (Hershatter and Epstein, 2010, p. 217; Moritz, 2014, p. 43; Schweyer, 2015, p. 28), and working remotely (e.g., from home or calling in remotely for meetings) (Kuhl, 2014, p. 26; Schweyer, 2015, p. 28). Twenge et al. (2010, p. 1136) found that this desire for work-life balance starts before workers have families and should also aim at younger people who want leisure time to travel or spend with their friends. Including these kinds of benefits to an incentive scheme for Millennials can therefore be promising (e.g., Moritz, 2014) and needs further exploration.

Another possible component of benefit packages is training and development opportunities. Wong et al. (2008, p. 887) found that Generation Y was less motivated by power and the ability to exercise or influence authority and more motivated by career progression and advancement opportunities than previous generations. Also, Westerman and Yamamura (2007, p. 156) report that career development and success as professionals predicted younger generation employee's job satisfaction and their intention to remain with the organization.

Concluding from the general research overview on work-related generational differences and the specific overview concerning incentive preferences, it can be identified that there is a lack of studies using rich methodological approaches as well as of studies being conducted outside of North America. Moreover, the area of generational differences in incentive preferences in underdeveloped. As this field therefore seems promising, this thesis aims at

exploring differences in incentive perceptions of Generation Y in Germany, bedded in the overall research of work-related generational differences, by using time-lag data.

2.2.3 Hypotheses development

Based on the existing literature, four hypotheses concerning Millennials in Germany will be explored within this thesis. As stated in the literature review Generation Y has been found to value freedom related values more than Generation X and Baby Boomers. Therefore, it is suggested that Millennials seek for work opportunities that supply freedom and autonomy while also being prepared to leave a company if these needs are not met (Cennamo and Gardner, 2008, p. 902) – whereby it is assumed that they leave a company before turning dissatisfied and changing to a job in which they will be more satisfied. Further, Breitsohl and Ruhle (2012, p. 108) have found that German Millennials were more satisfied with their income than Generation X. These results lead to the assumptions of Hypotheses 1a and 1b.

Hypothesis 1a: Generation Y is more satisfied with their job than Generation X.
Hypothesis 1b: Generation Y is more satisfied with the income of their household than Generation X.

Further, it has been found that Generation Y is generally more satisfied with their income than their precursory generation and, that Generation Y is often found to be more interested in non-monetary than monetary advantages (e.g. career advancement and growth and development opportunities) (Breitsohl and Ruhle, 2012, p. 108; Westerman and Yamamura, 2007, p. 156; Wong et al., 2008, p. 887). Therefore, it can be suggested that monetary incentives do not affect Generation Y's income satisfaction as positively as they affect Generation X's income satisfaction leading to the second hypothesis.

Hypothesis 2: Generation Y's satisfaction with the income of their household is less positively associated with monetary incentives than Generation X's satisfaction with the income of their household.

Different studies have found that work-centrality has declined for Generation Y with an increased desire for work-life balance (e.g. Cennamo and Gardner, 2008; Pyöriä et al, 2017; Twenge et al., 2010), which leads to the third hypothesis.

Hypothesis 3: Generation Y will be more likely to reduce their working hours (taking into account that the income will decrease) than Generation X.

As expressed in the literature review, Generation Y is known for craving immediate and frequent feedback (e.g. Beekman, 2011; Moritz, 2014), which leads to the assumption for the fourth Hypothesis.

Hypothesis 4: Generation Y's job satisfaction will be more positively associated with a regular performance assessment than Generation X's job satisfaction.

3 Research Design and Method

3.1 Obstacles in generational research

Studies on generational research face a number of obstacles. For this thesis three main obstacles will be discussed in the following: firstly, problems with the method of data analysis, secondly, country specificity and thirdly, the influence of different types of samples (e.g. Breitsohl and Ruhle, 2012; Parry and Urwin, 2011; Twenge, 2010).

One of the obstacles in generational research is using the right method of data analysis to find generation-effects detangled from age- or period-effects. As already touched in the literature review generation-effects are caused purely by experiences and characteristics of a cohort of individuals and are impacted by their environment (Rhodes, 1983) (also see 2.1). The methodological obstacle lies within the ability to distinguish these generation-effects from age-effects (e.g., maturity) or time- (or period-) effects (e.g., historical events), as the three factors are often interrelated due to their linear relationship (Parry and Urwin, 2011, p. 82). Age-effects on the one side reflect individual maturation through psychological and biological development and experiences during a lifetime and can also be

related to organizational tenure differences (e.g., career or life-cycle stage) giving rise to variable organizational experiences which can also impact many of the attitudinal variables of interest to generational researchers (Parry and Urwin, 2011; Rhodes, 1983). Period-effects on the other side are defined as being caused by environmental change at specific points in time (e.g., wars or technological advances) and can affect all generations (Rhodes, 1983). Especially in the context of work-related generational differences period-effects can also mean changes in the work environment like the nature of supervision, the reward structure, and labour market conditions (Rhodes, 1983, p. 330). Hereby the assumption is that if attitudes would be purely influenced by age-effects, these attitudes would change throughout time when people get older. Whereas for generation-effects the expectation is, that these attitudes will stay constant throughout the aging process (Rhodes, 1983). This means that when measurements are conducted at the same point in time (e.g., cross-sectional study design) the different generations will be at different ages so that the influence between generation-effects and age-effects is difficult to detangle, whereas when measurements are conducted at different points in time with respondents at same ages, period-effects can play a role and influence the results (Parry and Urwin, 2011). As stated in the literature overview, the majority of studies on generational differences have been based on cross-sectional study designs and not on longitudinal or time-lag data, as the two latter types of datasets are more difficult to obtain (Breitsohl and Ruhle, 2012, p. 109). Cross-sectional data can be quite prone to being influenced by age-effects because they include information compiled at only one point in time from members of different generations at different ages (Breitsohl and Ruhle, 2012, p. 109). Parry and Urwin (2011) even state that it is impossible to find real generational differences when working with a cross-sectional study design. On the one hand, using longitudinal or time-lag data such as panel data may overcome this obstacle to understand whether differences are due to age- or generation-effects, as data from same measures from different generations at the same age in different points in time can be compared (Rhodes, 1983). On the other hand, this can lead to a possible confound with period-effects, as the longitudinal data is taken from different time periods. But, as behaviors and attitudes are often developed early in life (e.g., childhood and early adolescence (also see 2.1)), period-effects are mostly seen to be the weakest

among the three effect types and are therefore the least critical (Low et al., 2005; Twenge, 2010).

Secondly, country specificity can play a critical role and research conducted in different parts of the world can lead to ambiguous and mixed results (Breitsohl and Ruhle, 2012, p. 108-109; Twenge, 2010, p. 205). Parry and Urwin (2011) conducted a literature review and found that most research has been conducted in the North American context and therefore relied on the generational definitions used in these countries. Often, research conducted in other western countries builds on these generational definitions and even though the Western World seems quite similar in terms of culture, they often do have differences in important events that formed their histories which have shaped the people of those countries (Parry and Urwin, 2011, p. 90). This is why results of generational research conducted in for example the USA cannot simply be generalized to all regions around the world (Parry and Urwin, 2011, p. 91). According to Breitsohl and Ruhle (2012, p. 107) especially research on regions like Europe, Africa or the Middle East or intercultural research has been rare. Therefore, so far there is no broad ground to compare study results of North American studies one-to-one to those of other regions resulting in another obstacle in the generalizability and use of generational research results.

Thirdly, the type of samples used for generational research often varies between studies. Oftentimes studies have relied on (high school or university) student samples, instead of workforce samples (Twenge, 2010). The problematic issue of using samples of respondents that have not yet entered the workforce is that they might have expectations of work life that differ from the reality and that these expectations and also their values might change once they have entered the working life (Twenge, 2010, p. 202). Also, especially for university student samples it can be argued that respondents with a university degree are not representative for their whole generation which consists of people of all educational classes (Treuren and Anderson, 2010, p. 57). Therefore, working with samples that not only consist of actual workforce members, but also cover all societal classes, for example by using national representative data sets (e.g. Breitsohl and Ruhle, 2012; Pyöriä et al., 2017), is needed to uncover generational differences and generate valuable results.

3.2 Data collection

Taking into account the obstacles in generational research stated above, data from the representative longitudinal German Socio Economic Panel (SOEP) has been chosen as a basis for answering the hypotheses of this thesis. The German SOEP is a wide-ranging study of private German households operated by the German Institute for Economic Research (Deutsches Institut für Wirtschaftsforschung, DIW). Since 1984 the panel survey is conducted every year with around 30.000 respondents of nearly 11.000 households in Germany. The panel mainly gives information about the German socioeconomic situation, covering topics that range from household composition, over occupational biographies, employment, earnings, to health and satisfaction indicators (DIW, 2018). For this thesis mainly questions concerning employment, earnings and satisfaction indicators are used.

The data collection is executed by the TNS Infratest Sozialforschung. All samples are regionally clustered multi-stage random samples and the respondents are selected by random-walk. Multi-stage sampling makes sampling more practical by dividing large clusters of population into smaller clusters in several stages (Salkind, 2010). The interviews are generally conducted face-to-face (DIW, 2018). Face-to-face interviewing has several advantages compared to e.g. online surveys. A face-to-face interviewer can for example pay attention to social cues (e.g. voice, intonation or body language) and also keep up the focus of an interviewee and track the completion of the survey (in comparison: online surveys are for example often not completed, which reduces the response rate (Evans and Mathur, 2005, p. 202)). Further, misunderstandings of questions and survey techniques can be ruled out more easily as the interviewer can explain if an interviewee fails to understand and therefore reduce errors (Opdenakker, 2006). Due to its broad execution and the continuous enhancement of the sample the data of the SOEP is seen to be representative for the German population (Wagner, Frick, and Schupp, 2007)[6]. Access to the data of the SOEP was provided through a contract between the chair of Prof. Dr. Sliwka at the University of Cologne and the DIW.

[6] For further information on the SOEP, please see https://www.diw.de/en/soep

Most studies focusing on generational research use quantitative survey-based designs which are either conducted in a cross-sectional or longitudinal setting (Parry and Urwin, 2011). Parry and Urwin (2011) point out that some studies can be found that use qualitative designs with in-depth focus groups or interviews (e.g., Gursoy, Maier, and Chi, 2008; Terjesen, Vinnicombe, and Freeman, 2007), but mostly these study designs fail to identify real generational differences and to deliver generalizable results due to lack of sample size and a missing longitudinal design. Therefore, the use of the survey method of the SOEP panel data suits the intention of this thesis of conducting generational research.

Further, working with the SOEP allows overcoming some of the obstacles stated in 3.1. Firstly, as said, the SOEP is a longitudinal data set that grants the possibility to compare between different times (for this thesis 2015 vs. 2002) through which age-related effects can be controlled for (the exact methodology will be explained in part 3.3). Using this approach will not exclude period-effects (Breitsohl and Ruhle, 2012, p. 127), but as stated in 3.1 this effect is the least critical of the three. Secondly, the SOEP is a national representative survey of the *German* workforce, through which this study will contribute to widening generational research to other parts of the world besides North America. Lastly, the data is representative for the German *workforce* and therefore allows studying generational differences within the German working population across different societal and educational classes and does not rely on a student sample.

3.3 Method of data analysis

The data of the SOEP on the one hand focusses on socioeconomic aspects and questions which highly suit the research questions of this thesis focusing on incentive preferences. On the other hand, it is also very compatible with the purpose of conducting generational research, as it provides the same questions across all waves and therefore grants the opportunity to compare the two generations Generation X and Generation Y at the same ages. The analysis is split up into two parts: for the first part time-lag data and for the second part cross-sectional data is used.

3.3.1 Time-lag data analysis

In the first part of the analysis time-lag data is used, based on the approach of Breitsohl and Ruhle (2012). For this matter the results of respondents aged 21-33 years in 2015 (Generation Y, born between 1982 and 2000) are compared with the results of respondents aged 21-33 years in 2002 (Generation X, born between 1968 and 1981). The questions in the SOEP have changed throughout the years, but the questionnaires from 2002 and 2015 contain some identical questions concerning incentives, so that they are usable to compare across the two generations. Questionnaires from earlier years do not contain these kinds of questions and can therefore not be used. Additionally, the questionnaire of 2002 firstly included Euro as the currency for questions asked, as the Euro replaced the Deutsche Mark in Germany on the first of January, 2002 (Würz, 2016). Therefore, the responses concerning amounts of money (e.g., height of income) can be easily compared to those of 2015 without having to use exchange rates. This is why the questionnaires of the years 2002 and 2015 have been chosen. To be able to compare the two generations at the same age spans with the given two years of the panel (2002 and 2015), the age range needed to be reduced by six years to 21-33 years, even though Generation Y by definition was aged 15-33 years in 2015 (see part 2.1.3). In this part, hypotheses one, two and three are analyzed. The analysis is based on questions concerning how satisfied the respondents were with their job and the income of their household, what kind of bonuses or extra pay the respondents have received from their employer in the previous year of each survey (2001 and 2014 respectively) and, how many hours an employee would want to work if the employee could choose his or her own working hours. As the data was obtained from respondents from different generations at the same age, this approach contributes to a very small portion of time-lag studies controlling for age-effects as stated in the literature overview (e.g., Kowske, Rasch, and Wiley, 2010; Smola and Sutton, 2002; Twenge et al., 2010). Results from this part of the analysis will provide a general understanding if there are any incentive related differences between the two generations.

To test the hypotheses 1-3, four main questions from the SOEP are used. For Hypothesis 1, two questions on satisfaction levels are used. The SOEP uses single-item measures to measure satisfaction with job and satisfaction with the income of a household. The two

areas ‘job’ and ‘income of your household’ are based on the question: “How satisfied are you today with the following areas of your life?” and are rated on a scale from 0 (totally unsatisfied) to 10 (totally satisfied). The SOEP asks questions concerning many different areas and therefore is extensive in its length (e.g. 174 questions in 2015). Thus, it mostly only contains single-item measures to keep the questionnaires as short as possible (Breitsohl and Ruhle, 2012, p. 116) (more on single-item measures in 5.3). With these two questions for the two parts of H1 a linear regression analysis is used with generation as the independent variable and satisfaction with the job and with the income of the household respectively as the dependent variables. To control for possible confounding factors, age, gender, monthly net income and occupation (full-time, part-time or apprenticeship) and additionally for H1b having a second job are added as control variables. Gender is taken into account as a confounding variable, as there is some evidence that women emphasize different work-related values than men (Ng, Schweitzer, and Lyons, 2010; Terjesen, Vinnicombe, and Freeman, 2007). Net income is added, as the height of the income is expected to affect the satisfaction with it and the job itself. To control if the type of working contract a respondent had influenced the satisfaction levels, type of employment coded as two dummy variables with full-time employment (1: full-time job, 0: part-time job or apprenticeship) and part-time employment (1: part-time job, 0: full-time job of apprenticeship) was added. Due to collinearity, a third dummy for apprenticeship did not need to be added. The respondent’s age was additionally added to the regressions to separate generation- from age-effects (Breitsohl and Ruhle, 2012; Deal, Altman, and Rogelberg, 2010; Parry and Urwin, 2011; Rhodes, 1983; Twenge 2010). The dummy variable second job was added for H1b, as an additional source of income had to be taken into account as an influencing factor for income satisfaction.

For the second hypothesis, which deals with measuring the effect of monetary incentives on satisfaction with income, the question: “Did you receive any of the following bonuses or extra pay from your employer last year (2001/2014)? (Multiple options possible)” is used. The selection options are: 13th month salary, 14th month salary, Additional Christmas bonus, Vacation pay, Profit-sharing, premiums, bonuses, and/or Other, or None. To measure the respondent’s satisfaction the same question as for Hypothesis 1b is used. To

test the hypothesis a multiple regression moderator analysis is used. Therefore, a dummy variable for bonus is created that equals 1 if the respondent had received at least one of the six different kinds of bonuses, and equals 0 otherwise. Thereby, the dependent variable is satisfaction with the income of the household, the independent variable is generation and the moderator the bonus dummy. As control variables gender, net income, type of employment and age were added due to the above stated reasons.

For Hypothesis 3 respondent's willingness to reduce their working hours is assessed through the question "If you could choose your own working hours, taking into account that your income would change according to the number of hours: How many hours would you want to work? (Name amount of hours per week)". The working hours stated in the question "How many hours per week are stipulated in your contract (excluding overtime)?" were used to control for the actual reduction (or increase) of working hours. To test the Hypothesis the deviation between stipulated worktime and desired worktime was generated and a multiple linear regression analysis was run with the deviation as the dependent variable and generation as the independent variable. As control variables gender, type of employment, age and as a new variable the marital status were added to the regression. Gender and type of employment are of special interest here, as in Germany women on average work less hours than men and occupy more part-time positions then men (Part-time rate: 2002: 40.2% for women and 5.5% for men; 2015: 48% for women and 10.6% for men) (Institut für Arbeit und Qualifikation, 2017; Statista, 2018). The variable marital status is added as it was assumed that being married or not could affect the desire for leisure time. Age is again added to control for age-effects.

3.3.2 Cross-sectional data analysis

The second part of the analysis is based only on the results from the questionnaire of 2016. This questionnaire contains further incentive related questions that have been asked for the first time and can therefore not be compared to any previous years. With the data from the year 2016 almost the whole age range of Generation X and Generation Y could be covered, so that for Generation X respondents aged 35-51 years in 2016 (birth years 1965-1981) and for Generation Y respondents aged 18-34 years (birth years 1982-2000) were taken into

account. Respondents younger than 18 years were not taken into account, as the sample should represent the adult working population[7]. Concrete, to test Hypothesis 4 concerning the influence of a regular performance assessment on job satisfaction, the question "Is your own Performance regularly assessed by a superior as part of an agreed procedure? Yes or no" is used. Again, the question on satisfaction with the job, as stated for H1, is used to measure the satisfaction level. To test the hypothesis a multiple regression moderator analysis is used. Therefore, a dummy variable for performance assessment, coded 1 if the respondent received an assessment and 0 if not, was created and used as the moderator. Again, satisfaction with job was used as the dependent variable and generation as the independent variable. Gender, monthly net income and age were again added as control variables. Using this second form of analysis has two benefits: firstly, a question related to a further component of an incentive system can be analyzed and secondly, the period is held constant as all data results from the same year, through which period-effects can be controlled for (Kowske, Rasch, and Wiley, 2010, p. 268).

The results of the two parts of the analysis shall reveal if there are any differences in the perception of incentives between the two generations Generation X and Y based on their satisfaction levels and some additional incentive related questions. Further they will give a first hint on which direction of incentive types is preferred by Millennials in Germany.

3.4 Sample

For Hypotheses 1-3 the data of the years 2002 and 2015 is used and adjusted to the needs of the target group of the research question of this thesis. Therefore, for each year respectively the data is reduced to the following: Firstly, only respondents that obtain the German citizenship are considered, as the research questions of this thesis focuses on Germany. Secondly, only respondents that work in full-time, part-time or are in an apprenticeship are considered, as the focal point lies on understanding incentive preferences of people that are part of the *workforce*. The focus here lies on differentiating the results of this thesis from many other studies that have relied on student samples, whose perceptions and behaviors could significantly deviate from those of people that are actually part of the working popu-

[7] Same approach as Breitsohl and Ruhle (2012, p. 115)

lation (Breitsohl and Ruhle, 2012, p. 107). Thirdly, the age range of respondents is reduced to 21 to 33 years, to compare Generation X and Generation Y at the same age span (see 3.3.1). Then the two data sets are merged and a dummy variable based on the year of the wave is created for Generation X (wave of 2002) and Generation Y (wave of 2015). It was coded 0 for Generation X and 1 for Generation Y. Together these two waves include a total of N = 4,707 respondents, which are split up into roughly equal sample sizes N = 2,544 respondents for Generation X and N = 2,163 respondents for Generation Y. The two sample groups did not differ on a statistically significant level in terms of the socio-demographic data age and gender tested. The average age was 27.7 years (standard deviation (*SD*) = 3.9 years) for Generation X and 27.6 years (*SD* = 3.8 years) for Generation Y (Mann Whitney U-test, age: p = 0.257). Also, gender is distributed significantly equal in this final sample with 52.7% males and 47.3% females in Generation X and 51.2% males and 48.2% females in Generation Y (Mann Whitney U-test, gender: p = 0.307). 'Gender' was coded as a dummy variable with 0 for female and 1 for male. The net income of Generation X is averaged out at approximately 1,237€ (*SD* = 679€) and for Generation Y at approximately 1,455€ (*SD* = 735€). Here the difference is significant (Mann Whitney U-test, age: p = 0.001, this issue will be picked up in 4.4). Further, for Generation X 77.8% were in a full-time employment (68.9%, for Generation Y), 12.5% in a part-time employment (18.4% for Generation Y) and 9.7% in an apprenticeship (12.7% for Generation Y). Around 5.1% of Generation X and 8% of Generation Y had a second job. In the Generation X subgroup 28.1% are married and in Generation Y 26.9%. As different questions are used for the three hypotheses tested and some respondents did not answer some of the questions, the population per hypothesis varies slightly. The adjustments that were made due to missing values are explained for each hypothesis in the results part in 4.1 of this thesis.

For Hypothesis 4 only data from the wave 2016 is used. Again, the data is reduced to respondents with a German citizenship and either a full-time or part-time employment or apprenticeship. As for this part of the analysis the generations are compared at different ages, the dataset is reduced to respondents aged 18-51 years. Thereof the dummy variable for Generation is created based on respondents aged 18-34 years for Generation Y (coded

as 1) and respondents aged 35-51 years for Generation X (coded as 0). This final sample contains N = 8,431 respondents, of which 5,814 respondents dispense to Generation X and 2,618 to Generation Y with an roughly equal gender distribution of 48.2% males for Generation X and 51.5% males for Generation Y. Again, a gender dummy variable is created with 1 for male and 0 for female. The average monthly net income for Generation X is 2,067€ (SD = 1,609€) and for Generation Y is 1,424€ (SD = 813€). This income difference is statistically significant (Mann Whitney U-test, age: p = 0.001) and can be explained by the different ages at which the two generations were surveyed (this aspect will be picked up in 4.4). Furthermore, for Generation X 66.9% are full-time employees (61.8% for Generation X), 32.6% are part-time employees (16.7% for Gen Y) and 0.5% are in an apprenticeship (21.5% for Gen Y). The big difference in amount of apprenticeships can also be derived from the age difference within this analysis set-up combined with an average starting age of 20 years for apprenticeships in Germany in 2016[8]. Again, some values had to be declared as missing due to the lack of answers of some respondents for parts of the questions, this is explained in the results part in 4.2.

4 Results and Discussion

The data analysis was conducted with the data analysis and statistical software STATA (version 14.0). The testing of all hypotheses is run on a minimal significance level of p = 10%. To separate generation- from age-effects respondents' age was additionally entered into all regressions (Breitsohl and Ruhle, 2012; Deal, Altman, and Rogelberg, 2010; Parry and Urwin, 2011; Rhodes, 1983; Twenge, 2010). As stated in 3.4 for Hypotheses 1-3 the age distribution of Generation X and Generation Y among the two waves of 2002 and 2015 did not differ significantly. Due to the cross-sectional design, for Hypothesis 4 the respondents of the two generations were at different ages. Tables 1 and 2 display the full sample means, standard deviations, sample minimum and maximum and correlation patterns for Hypotheses 1-3; the descriptive statistics and correlation patterns for Hypothesis 4 can be found in tables 3 and 4.

[8] Based on the German apprenticeship report of 2016: https://www.ausbildung.de/downloads/Azubi_Report_2016_Web_Farbe_Doppelseite.pdf

Table 1: Descriptive statistics of time-lag data for H1-3: Total, Generation X and Generation Y

Variable	Total					Generation X					Generation Y				
	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max
Generation	4,707	.4595284	.4984123	0	1	2,544	0	0	0	0	2,163	1	0	1	1
Sat. Job	4,638	7.319319	1.971114	0	10	2,513	7.274572	1.99866	0	10	2,125	7.372235	1.937168	0	10
Sat.Income	4,640	6.646336	2.034232	0	10	2,503	6.403516	2.050565	0	10	2,137	6.930744	1.977844	0	10
Gender	4,707	.519864	.4996583	0	1	2,544	.5267296	.4993832	0	1	2,163	.5117892	.4999766	0	1
Age	4,707	27.6741	3.84772	21	33	2,544	27.72406	3.883594	21	33	2,163	27.61535	3.805151	21	33
Net income	4,389	1338.645	714.0959	0	9000	2,343	1236.796	679.4839	0	9000	2,046	1455.279	734.7975	0	6300
Full-time	4,707	.736775	.4404302	0	1	2,544	.7775157	.4159965	0	1	2,163	.6888581	.4630678	0	1
Part-time	4,707	.1523263	.3593751	0	1	2,544	.1253931	.3312292	0	1	2,163	.1840037	.3875768	0	1
Married	4,707	.2755471	.446837	0	1	2,544	2810535	.4496019	0	1	2,163	.2690707	.4435794	0	1
Second job	4,707	.0645847	.2458177	0	1	2,544	.0514937	.221046	0	1	2,163	.0799815	.2713273	0	1
Deviation	4,179	.1603972	6.530941	-40	40.2	2,208	.2400362	6.640883	-40	40.2	1,971	.0711821	6.406046	-40	40
Bonus	4,707	.6122796	.487282	0	1	2,544	.6792453	.4668584	0	1	2,163	.5335183	.4989906	0	1

All statistics based on data after missing values were defined.

Source: Author's analysis based on data from the German SOEP from 2002 and 2015

Table 2: Pearson and Spearman correlations of time-lag data for H1-3

		1	2	3	4	5	6	7	8	9	10	11	12
1	Generation	1	0.0322	0.1497***	0.0086	-0.0213	0.1816***	-0.1085***	0.0888***	-0.0248	0.0554***	-0.0424**	-0.1808***
2	Sat. Job	0.0247	1	0.3175***	0.0223	-0.0324**	0.0027	-0.0269*	-0.0077	0.0105	0.0159	0.0606***	0.0159
3	Sat. Income	0.1292***	0.3481***	1	-0.0263	0.0441**	0.2478***	0.0685***	-0.0269	0.0347**	0.0079	-0.0610***	0.1074***
4	Gender	-0.0149	-0.0032	-0.0285	1	0.0166	0.2560***	0.2293***	-0.3014***	0.0006	-0.0233	0.0831***	0.0138
5	Age	-0.0141	-0.0141	0.0412***	0.0268	1	0.3721***	0.1473***	0.1775***	0.4353***	-0.0077	0.0183	0.1086***
6	Net income	0.1526***	0.0634***	0.2653***	0.2358***	0.3650***	1	0.6146***	-0.3399***	0.1402***	-0.0146	-0.0824***	0.2387***
7	Full-time	-0.1003***	-0.0008	0.0895***	0.2290***	0.1762***	0.5281***	1	-0.7028***	-0.0034	-0.0646***	-0.1432***	0.1599***
8	Part-time	0.0813***	-0.0163	-0.0336*	-0.2849***	0.1409***	-0.3068***	-0.7092***	1	0.1608***	0.0646***	0.2318***	-0.1034***
9	Married	-0.0134	0.0288	0.0556***	-0.0060	0.4266***	0.1511***	0.0091	0.1408***	1	-0.0243	0.0004	0.0594***
10	Second job	0.0578***	0.0175	-0.0017	-0.0226	-0.0126	-0.0290	-0.0647***	0.0666***	-0.0228	1	0.0528**	-0.0181
11	Deviation	-0.0129	0.0467**	-0.0581***	0.0653***	0.0031	-0.0750***	-0.1564***	0.2429***	-0.0129	0.0657***	1	-0.0113
12	Bonus	-0.1491***	0.0155	0.1124***	0.0111	0.0803***	0.1820***	0.1640***	-0.1238***	0.0496***	-0.0215	-0.0215	1

Spearman correlations are in top right diagonal and Pearson correlations are in bottom left diagonal

Stat. Significance on 1% (5%, 10%) level is denoted by *** (**,*).

Source: Author's analysis based on data from the German SOEP from 2002 and 2015

Table 3: Descriptive statistics of cross-sectional data for H4: Total, Generation X and Generation Y

Variable	Total					Generation X					Generation Y				
	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max
Generation	8,431	.3105207	.4627343	0	1	5,813	0	0	0	0	2,618	1	0	1	1
Sat. Job	8,357	7.312672	1.894791	0	10	5,782	7.242823	1.886371	0	10	2,575	7.469515	1.904617	0	10
Sat. Income	8,340	7.098082	1.95291	0	10	5,794	7.113566	1.949088	0	10	2,546	7.062844	1.96151	0	10
Gender	8,431	.4924683	.4999729	0	1	5,813	.4823671	.499732	0	1	2,618	.5148969	.4998735	0	1
Age	8,431	38.46875	9.207954	18	51	5,813	43.71736	4.803371	35	51	2,618	26.81474	4.981861	18	34
Net income	7,953	1867.817	1441.507	0	40000	5,485	2067.339	1608.539	0	40000	2,468	1424.39	813.0651	0	8000
Perf. Ass.	7,786	.4068842	.4912845	0	1	5,287	.409495	.4917871	0	1	2,499	.4013605	.4902718	0	1

All statistics based on data after missing values were defined.

Source: Author's analysis based on data from the German SOEP from 2016

Table 4: Pearson and Spearman correlations of cross-sectional data for H4

		1	2	3	4	5	6	7
1	Generation	1	0.0637***	-0.0082	0.0426***	-0.8044***	-0.2427***	-0.0121
2	Sat. Job	0.0552***	1	0.3138***	0.0079	-0.0825***	0.0046	0.0171
3	Sat. Income	-0.0120	0.3355***	1	-0.0012	0.0049	0.2210***	0.0867***
4	Gender	0.0301**	0.0139	0.0027***	1	-0.0423***	0.3924***	0.0541***
5	Age	-0.8494***	-0.0730***	0.0109	-0.0319**	1	0.2751***	0.0107
6	Net income	-0.2064***	0.0494***	0.2257***	0.2962***	0.2529***	1	0.2320***
7	Perf. Ass.	-0.0077	0.0231	0.0909***	0.0535***	0.0072	0.1962***	1

Spearman correlations are in top right diagonal and Pearson correlations are in bottom left diagonal

Stat. Significance on 1% (5%, 10%) level is denoted by *** (**,*).

Source: Author's analysis based on data from the German SOEP from 2016

4.1 Results time-lag data analysis

4.1.1 Results Hypothesis 1

For Hypothesis 1a 'Generation Y is more satisfied with their job than Generation X' the results of the linear regression with generation as the independent variable and satisfaction with job as the dependent variable can be found in table 5. Gender, monthly net income, type of employment (full-time, part-time or apprenticeship, coded as dummy variables, see 3.3.1) and age are added as control variables. As stated above, age is added to the analysis to detangle generation-effects from age-effects. From the total N = 4,707 respondents, 1.47% did not report the level of satisfaction with job and 6.76% did not answer the net income question so that these were declared as missing values resulting in N = 4,332 respondents that answered all necessary questions (Generation Y: N = 2,012; Generation X: N = 2,320). On average the job satisfaction (scale 0-10, with 10 being totally satisfied) of a member of Generation Y was 7.372 with a standard deviation of 1.937 and 7.275 (SD = 1.999) for a member of Generation X (see table 1). The results of the linear regression show that the difference in job satisfaction levels between Generation X and Y is not significant (p = 0,969), so that both generations were similarly satisfied with their job. Neither did gender influence the satisfaction level significantly. Among the covariates net income, full-time employment and age had a significant influence, meaning that an increase in income raised the satisfaction level of a respondent slightly (a 100€ increase results in a 0.03 increase on the satisfaction scale) ($p < 0.01$), having a full-time employment (compared to part-time employment or apprenticeship) decreased the satisfaction with the job slightly (-0.32 on the satisfaction scale, $p < 0.01$) and an increase in age also reduced the satisfaction level slightly (1 year results in a -0.02 decrease on the satisfaction scale, $p < 0.05$). The

analysis shows that Generation Y is not more satisfied with their job than Generation X so that the results are not in line with H1a. This is conforming to the results of Breitsohl and Ruhle (2012), who also found that both generations were similarly satisfied with their jobs.

The results of the linear regression with generation as the independent variable and satisfaction with the income of the household as the dependent variable for Hypothesis 1b 'Generation Y is more satisfied with the income of their household than Generation X' can also be found in table 5. Again, gender, monthly net income, type of employment (full-time, part-time or apprenticeship) and age are added as control variables. Additionally, having a second job is added as a control variable as it has been assumed that possibly having an additional source of income may affect the satisfaction with the income of the household. From the total population, 1.42% did not respond to the satisfaction with income questions and again 6.76% did not answer the net income question, so that after these values were declared as missing the sample was reduced to $N = 4{,}331$ respondents (Generation Y: $N = 2{,}024$; Generation X: $N = 2{,}307$). On average the satisfaction with income of the household (scale 0-10, with 10 being totally satisfied) was 6.931 ($SD = 1.978$) for Generation Y and 6.404 ($SD = 2.051$) for Generation X (see table 1). The results of the regression show that generation has a significant influence on satisfaction with the income of the household, as the satisfaction level reported by respondents belonging to Generation Y was significantly ($p < 0.01$) higher than the level reported by respondents belonging to Generation X. The difference can be seen as generational as it was controlled for the following variables: firstly, gender, which in contrast to Hypothesis 1a had a significant impact, with a decrease of -0.36 marks on the satisfaction scale when being a male ($p < 0.01$), secondly, net income, which had the expected positive influence on income satisfaction ($p < 0.01$), thirdly, type of employment, which had no effect, fourthly second job, which had, contrary to the expectation, also no effect, and lastly, age, which did have a significant effect resulting in a slight reduction in the satisfaction level (1 year results in a -0.038 decrease on the satisfaction scale, $p < 0.01$) (Breitsohl and Ruhle, 2012). The results show that with the added control variables Generation Y is more satisfied with the income of their household than Generation X which is in line with H1b. The coefficient of determination ($R^2 = 0.093$, adjusted $R^2 = 0.0913$, $\eta^2 = 0.0928$) shows that 9.3% of the variation in satisfaction with the

income of the household is explained by generational differences (when controlling for the above stated variables). This result is also in line with the findings of Breitsohl and Ruhle (2012, p. 123), who reported that Generation Y was more satisfied with the income of the household than Generation X when controlling for age, current residence, income and gender.

Table 5: Dependent variables: (1) satisfaction with job and (2) satisfaction with income of the household: the influence of being a member of Generation Y

VARIABLES	(1) Satisfaction with the job	(2) Satisfaction with income of the household
Generation Y	0.00243	0.344***
	(0.0621)	(0.0615)
Gender	-0.0696	-0.363***
	(0.0632)	(0.0626)
Net income	0.000307***	0.000900***
	(5.43e-05)	(5.37e-05)
Full-time employment	-0.320***	-0.0614
	(0.114)	(0.112)
Part-time employment	-0.162	0.175
	(0.131)	(0.128)
Second job		-0.0375
		(0.120)
Age	-0.0220**	-0.0384***
	(0.00903)	(0.00895)
Constant	7.807***	6.568***
	(0.227)	(0.225)
Observations	4,332	4,331
R-squared	0.009	0.093

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Source: Author's analysis based on data from the German SOEP from 2002 and 2015

4.1.2 Results Hypothesis 2

The results of the moderator analysis (with satisfaction with the income of the household as the dependent variable, Generation Y as the independent variable and bonus as the moderator) for testing Hypothesis 2 'Generation Y's satisfaction with the income of their household is less positively associated with monetary incentives than Generation X's satisfaction with the income of their household' can be found in table 6. Like for Hypothesis 1a and b gender, net income, type of employment and age are added as control variables. The same values as stated in 4.1.1 for H1b were declared as missing resulting in a sample size of N = 4,331. Of these respondents 53.35% of Generation Y and 67.92% of Generation X received at least one of the monetary incentives (see table 1). The results show that both, generation and a bonus payment (coded as a dummy variable with 0: not getting a bonus at

all and 1: getting a bonus of any kind, see 3.3.1 for the bonus options) on its own have a positive significant influence on the tested satisfaction level. In other words, firstly, like as found in Hypothesis 1b, Generation Y is more satisfied with the income of the household than Generation X ($p < 0.01$) and secondly, having received a bonus increased the satisfaction level of both generations compared to not having received a bonus ($p < 0.01$). Using the moderator analysis to see if the two variables satisfaction and Generation Y are moderated by the receipt of a bonus shows that if a Generation Y member received a bonus compared to if a Generation X member received a bonus, decreased the satisfaction level of a Generation Y member from 0.706 by -0.496 to 0.21 units. As it has been controlled for gender, net income, type of employment and age, the effect can be seen as generational (Breitsohl and Ruhle, 2012). Of the control variables, again gender and age have a negative significant impact on the satisfaction level ($p < 0.01$), net income has a positive significant impact ($p < 0.01$) and type of employment has no effect. These results show that even though a Generation Y member is more satisfied with the income of the household itself (H1b), the satisfaction level is less positively associated with the receipt of monetary incentives than the satisfaction level of a Generation X member which is in line with H2. The R^2 shows that 10.2% (adjusted $R^2 = 0.1002$, $\eta^2 = 0.1018$) of the variation in satisfaction with the income of the household is explained by the generational differences (with the receipt of a bonus as a moderator and when controlling for the above stated variables).

Table 6: Dependent variable: Satisfaction with the income of the household: the influence of being a member of Generation Y moderated by a bonus payment

VARIABLES	(1) Satisfaction with the income of the household
Generation Y	0.706***
	(0.0980)
Bonus (dummy)	0.584***
	(0.0889)
Moderator Generation Y # Bonus	-0.496***
	(0.123)
Gender	-0.337***
	(0.0624)
Net income	0.000870***
	(5.41e-05)
Full-time employment	-0.0795
	(0.111)
Part-time employment	0.207
	(0.128)
Age	-0.0412***
	(0.00892)
Constant	6.269***

	(0.228)
Observations	4,331
R-squared	0.102

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Source: Author's analysis based on data from the German SOEP from 2002 and 2015

4.1.3 Results Hypothesis 3

Hypothesis 3 'Generation Y will be more likely to reduce their working hours (taking into account that the income will decrease) than Generation X' was tested by using a linear regression with the deviation between the stipulated and desired working hours of the respondents as the dependent variable and Generation Y as the independent variable. Like for the other hypotheses age (to control for generational effects), gender and type of employment were added as control variables. Additionally, as explained in 3.3.1 a dummy variable for the marital status (coded 1: if a respondent was married and 0: if a respondent was not married i.e. single, divorced or widowed) was added. 9.9% of the population did not respond to the question how many hours were stipulated in their work contracts and 2.27% did not respond to the question how many hours they would want to work. These values were declared as missing, resulting in a new sample size of N = 4,179 (Generation Y: N = 1,971; Generation X: N = 2,208) with 30% of females and 7% of males being part-time employees in Generation Y and 22% of females and 4% of males being part-time employees in Generation X. On average Generation Y members working in full-time employment wanted to work 0.775 hours *less* (SD = 5.765) (part-time: 4.078 hours *more, SD* = 7.828) and Generation X members working in full-time employment wanted to work 0.198 hours *less* (SD = 6.142) (part-time: 3.755 hours *more*, SD = 7.866). The results of the linear regression, which can be found in table 7, show that being a member of Generation Y significantly decreased the deviation between stipulated and desired working hours per month ($p < 0.01$) controlling for the above stated variables. This means that Generation Y wanted to work less hours than stipulated in their work contracts and also that this difference is significantly higher compared to the delta reported by Generation X members. Among the covariates, the type of employment has the strongest significant effect in the positive direction on the delta of desired working hours relative to the number of actual working hours ($p < 0.05$ for full-time employment and $p < 0.01$ for part-time employment), with especially respondents working in part-time wanting to work considerably more hours

(approximately 6 hours more). Also gender has a very strong positive significant influence ($p < 0.01$) on the delta of desired working hours, with men wanting to work more hours than women. Further, being married has a negative significant influence ($p < 0.01$) and also age has a negative significant influence ($p < 0.01$), with older respondents wanting to work less hours. Due to the control variables, the results can be seen as generational. In other words members of Generation Y are more likely to reduce their working hours, taking into account that the income will decrease, (with a reduction of around half an hour per week) than Generation X when controlling for gender, type of employment, marital status and age which is in line with H3. 8.6% (adjusted $R^2 = 0.0851$, $\eta^2 = 0.0865$) of the variation in the deviation is explained through the generational effect (when controlling for the above stated).

Table 7: Dependent variable: deviation between stipulated and desired working hours: the influence of being a member of Generation Y

VARIABLES	(1) Deviation of working hours
Generation Y	-0.530***
	(0.195)
Gender	2.024***
	(0.203)
Married (dummy)	-0.696***
	(0.242)
Age	-0.0795***
	(0.0302)
Full-time employment	0.787**
	(0.336)
Part-time employment	6.306***
	(0.424)
Constant	0.237
	(0.759)
Observations	4,179
R-squared	0.086

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Source: Author's analysis based on data from the German SOEP from 2002 and 2015

4.2 Results cross-sectional data analysis (Hypothesis 4)

As explained in 3.3 the last hypothesis was analysed in a cross-sectional design with data from the year 2016. The results of the moderator analysis (with satisfaction with the job as the dependent variable, Generation Y as the independent variable and a dummy for performance assessment (coded 1: if the respondent had received a performance assessment in the prior year as part of an agreed procedure and 0: if not) as a moderator) for Hypothesis 4

‘Generation Y’s job satisfaction will be more positively associated with a regular performance assessment than Generation X’s job satisfaction’ can be found in table 8. Gender, monthly net income and age were again added as control variables. Of the population (N = 8,431) 0.88% did not respond to the satisfaction question, 0.79% did not respond to the question concerning the performance assessment and 5.54% did not respond to the question about net income, so that after these values were declared as missing the sample size was reduced to N = 7,375 who answered all necessary questions (Generation Y: N = 2,345; Generation X: N = 5,030). The samples of the two generations were different in size, however 40.14% of Generation Y and 40.95% of Generation X received a performance assessment, so that Generation X and Generation Y did not differ significantly in this matter (Mann-Whitney U-test: performance assessment $p = 0.628$) (see table 3). The results show that Generation Y on its own has a negative significant influence on the tested satisfaction level ($p < 0.05$), meaning that in this setting and different to the findings in Hypothesis 1a, belonging to Generation Y decreased the level of satisfaction with job slightly, whereas a performance assessment on its own did not have an effect. Using the moderator analysis to see if the two variables satisfaction and Generation Y are moderated by a performance assessment shows, that compared to members of Generation X the change from not receiving to receiving a performance assessment increased the satisfaction level of a Generation Y member slightly from -0.214 by +0.166 to -0,048 units ($p < 0.1$) (and more strongly than the satisfaction level of a Generation X member). Among the control variables firstly, gender does not have an effect, secondly, net income has a significant effect on satisfaction ($p < 0.01$) slightly in the positive direction, and thirdly, age has, as expected within the cross-sectional set-up, a significant effect ($p < 0.01$), with a decrease in satisfaction as respondents get older, but with a much weaker effect than generation (-0.0258 points on the satisfaction scale for age and -0.214 for generation). These results show that even though a Generation Y member is less satisfied with the job then a member of Generation X, the satisfaction level is more positively associated with a regular performance assessment than the satisfaction level of a Generation X member which is in line with H4. The given R^2 shows that 1% (adjusted $R^2 = 0.0095$, $\eta^2 = 0.0103$) of the variation in satisfaction with the job is explained by the generational differences (with performance assessment as a moderator and when controlling for the above stated variables).

Table 8: Dependent variable: satisfaction with job: the influence of being a member of Generation Y moderated by a performance assessment

	(1)
VARIABLES	Satisfaction with job
Generation Y	-0.214**
	(0.0970)
Performance Assessment (dummy)	0.00466
	(0.0553)
Moderator Generation Y# Performance Assessment	0.166*
	(0.0964)
Gender	-0.0231
	(0.0467)
Net income	8.44e-05***
	(1.89e-05)
Age	-0.0258***
	(0.00460)
Constant	8.180***
	(0.202)
Observations	7,375
R-squared	0.010

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Source: Author's analysis based on data from the German SOEP from 2016

4.3 Summary of results

In conclusion, the results of the analysis show that with the given data generational differences in the perception of incentive preferences could be revealed to some extent. No difference was found in the level of satisfaction with the job between Generation X and Generation Y (not in line with H1a), whereas for the satisfaction with the income of the household, Generation Y showed higher satisfaction levels (in line with H1b). Or, putting it simpler, members of Generation Y reported greater satisfaction with the income of their households than members of Generation X. Further, Millennials' satisfaction with the income of their household was less positively associated with the receipt of a monetary incentive (13th month salary, 14th month salary, Additional Christmas bonus, Vacation pay or Profit-sharing / premiums / bonuses) than Generation X's satisfaction (in line with H2). In other words, having received a monetary incentive had a stronger positive effect on the income satisfaction level of Generation X members, than on Generation Y members. Additionally, it has been found that members of Generation Y were more likely to reduce their working hours, accepting that the income will decrease, than members of Generation X (in line with H3). Lastly, tested with the cross-sectional data design, even though the job satisfaction level of a member of Generation Y was lower than that of a member of Generation X, the satisfaction level was more strongly positively influenced by a performance assess-

ment as part of a regular procedure than the satisfaction level of a member of the older generation (in line with H4).

4.4 Discussion

With the given data set and method of analysis this study contributes to a small portion of studies on work-related generational differences using a longitudinal data set that grants the possibility to compare generations at the same age at different points in time. It also is one of the few studies that have been conducted in Germany, therefore widening the geographic scope of generational research (Breitsohl and Ruhle, 2012). Further it widens the scope of research on work-related generational differences with its focus on incentive perceptions. In the following the results will be discussed in the light of the three research questions of this thesis.

Research questions 1 was to find out whether Generation X and Y differ in satisfaction levels of their income and job. The two parts of Hypothesis 1 addressed this research question. Contrary to the expectation, it has been found that the two generations examined in this thesis did not differ in terms of satisfaction with their job. Interestingly within the cross-sectional set-up from the year 2016 for Hypothesis 4, the regression results show that Generation Y was even, contrary to the expectation, significantly ($p < 0.05$) *less* satisfied with their job than Generation X (see table 8). But as the generational members were at different ages in this setup (Generation Y: 18-31 years; Generation X: 35-51 years) the effect in respect to generational research has to be treated carefully, as the difference can also be caused by age-effects and not generational-effects. But, this result shows that age is also an interesting factor to be considered when looking at incentive schemes, as it had significant effects in both regressions. The result from H1a that the two generations job satisfaction levels are quite stable, is in line with the results of earlier studies (e.g. Breitsohl and Ruhle, 2012; Cennamo and Gardner 2008; Kowske, Rasch, and Wiley, 2010). A possible reason for this could be that all employees, no matter which generation belonging to, choose a job based on what they like and proceed analogously in changing a job when they become dissatisfied (Kowske, Rasch, and Wiley, 2010). For the second part of H1, it has been found, that Generation Y is more satisfied with the income of their household, inde-

pendent of the actual amount, than Generation X. This is in line with the results of other research conducted in Germany (Breitsohl and Ruhle, 2012), but contrary to earlier research conducted in the USA, which found that income satisfaction did not differ between generations (Kowske, Rasch, and Wiley, 2010). It has to be considered that in this analysis the income difference between Generation X and Generation Y is statistically significant, with members of Generation X earning approximately 218€ less on average ($p < 0.01$) than Millennials. This could mean that Generation Y was just more satisfied because they earned more on average. But firstly, the net income has been added as a control variable to the regression, and secondly, looking at the inflation rate[9], 100€ in 2002 were only worth around 82€ in 2015, which again relativizes the difference in income. Therefore, it can be suggested that even though Generation Y earned more on average, the periodical circumstances made the amount and the satisfaction levels comparable and that Generation Y was more satisfied with it. This result is also compatible with the findings of Twenge et al. (2010) who found that the importance of extrinsic rewards, such as status or money, peaked with Generation X, and also with the findings of Breitsohl and Ruhle (2012), who also found that Generation Y was more satisfied with their income. One possible explanation of this finding can be found in research conducted by Ng, Schweitzer, and Lyons (2010), who state that Generation Y had realistic expectations of their first jobs and salaries, which might explain why they are more satisfied with it. These results could also imply, that the younger generation may have different sets of work values that lower the standards by which they assess the height of income compared to Generation X and that they are therefore pleased with less than their predecessors. This could also be influenced by the circumstances under which Generation X and Generation Y entered the workforce. Generation X grew up and started entering the workforce during a time where unemployment, downsizing and social inequalities were dominating the labor market (Pyöriä, 2017, p. 10; Smola and Sutton, 2002, p. 365; Twenge et al., 2010, p. 1120), whereas Generation Y is entering the workforce in times of an economic upswing in Germany (Federal Statistical Office of Germany, 12.01.2017) with a steady decline of the unemployment rate (Statista, 2018). These differences in labor market circumstances could result in period-effects

[9] Inflation rate taken from the German Federal Statistical Office (https://www.destatis.de/DE/ZahlenFakten/GesamtwirtschaftUmwelt/Preise/Preise.html)

influencing the respondent's satisfaction levels, which have not been controlled for. Further, when interpreting these results, besides the generation-effect that was identified, also gender plays a role that has to be considered, as men on average earned a higher income than women (for Generation Y: 1,605€ for men and 1,295€ for women, t-test: $p < 0.01$; for Generation X: 1410€ for men and 1,046€ for women, t-test: $p < 0.01$), but interestingly had a significantly lower satisfaction with income level than women (see table 5). So, it can be concluded that for research question 1, the job satisfaction did not differ between the generations, whereas the income satisfaction level significantly did differ between Generation X and Y. For the latter for practical implications for incentive schemes, it has to be taken into account that also gender plays an important role (more in 5.2).

The second research question, to reveal if the two generations are influenced differently by different kinds of rewards, was examined by the analysis of Hypotheses 2 and 3. It has been found that the two generations did differ in their perception of different kinds of rewards. Firstly, the receipt of different kinds of monetary rewards (13th month salary, 14th month salary, Additional Christmas bonus, Vacation pay or Profit-sharing / premiums / bonuses) affected the satisfaction with income level of the two generations differently. Here, the receipt of monetary rewards led to a stronger increase in satisfaction with the income for the older generation than for the younger generation. In other words, Generation Y's satisfaction level was less positively influenced by a monetary incentive than Generation X's satisfaction level. On the one side, similar results have also been found in a study by Twenge et al. (2010) who state, that extrinsic rewards have been more important to Generation X than Generation Y. It is also in line with results of a study by Rawlins, Indvik, and Johnson (2008) who found that only less than 10% of their Generation Y respondents found performance-based rewards essential in accepting a job, as well as with other studies reporting that Generation Y has been found to being more interested in non-monetary than monetary advantages like career advancement and growth and development opportunities (Breitsohl and Ruhle, 2012, p. 108; Westerman and Yamamura, 2007, p. 156; Wong et al., 2008, p. 887). On the other side the findings of this thesis are contrary to the results of a study by Pregnolato, Bussin, and Schelchter (2017), who found that *all* generations considered financial rewards (Benefits, Performance and Recognition, Remuneration

and Career) as the most important component of their reward packages. But, the results of the latter study are limited as the authors were not able to control for age-effects, as data was obtained at one point in time from respondents at different ages. Even though the results of this thesis were significant and in line with most other studies exploring a similar topic, it has to be considered that in Generation Y only 53.35% of the respondents had received at least one of the monetary rewards, compared to a 67.92% receiving rate for Generation X. Therefore, for future research it could also be interesting to look at how many employers actually still make use of monetary incentive like the ones interrogated in the SOEP questions and find out if the trend has shifted in a different direction.

Secondly, it has been found that Generation Y reported a significantly higher number of hours they would like to work less, taking into account that their income would be reduced, than Generation X. Similarly speaking, the younger generation's willingness to work fewer hours was stronger than for their predecessor. An interpretation of this result is that Generation Y has a stronger desire for work life-balance and more leisure time. This is in line with many other research results that found that Generation Y valued leisure time more strongly and wished for more work-life balance (Cennamo and Gardner, 2008; Cogin, 2012; Pyöriä et al, 2017; Twenge et al., 2010). Concerning these results two aspects have to be taken into account. Firstly, it has to be considered that not only the generation a respondent belongs to, but also his or her gender has a strong link to working time preferences, as men on the one side already have a statistically significant higher amount of stipulated working hours than women (for Generation Y: on average 38.4 hours per week for men and 34.1 hours per week for women, t-test: $p < 0.01$; for Generation X: on average 38.5 hours for men and 34.8 hours for women, t-test: $p < 0.01$) and on the other side also an increased desire for wanting to work more hours (see table 7: approx. 2 hours per week, $p < 0.01$). This has also been reported by Breitsohl and Ruhle (2012, p. 121). This finding indicates that for the consideration of designing an incentive scheme with 'time' as an incentive factor, gender has to be taken into account as not both genders might be similarly satisfied by this kind of incentive. Secondly, also the type of employment contract (full-time vs. part-time) has a strong influence on the desired amount of hours respondents reported that they wanted to work (see table 7: part-time employees want to work approxi-

mately 6 hours more per week in comparison to full-time employees or apprentices, $p < 0.01$). Therefore, again when wanting to design an incentive scheme with 'time' as the incentive, it has to be carefully considered for which kind of employees the scheme shall be put in place. All in all, these results concerning research question 2 indicate that rethinking incentive schemes for Millennials in Germany and going away from purely monetary incentives like bonuses to using 'time' as an incentive method (i.e. work-life balance options or additional vacation days) can be a promising option for millennial employees, but gender and type of employment need to be considered in the design (more on the practicability in 5.2).

The third research question dealt with finding out if the job satisfaction levels of Generation X and Generation Y are affected differently by performance assessments. Therefore, Hypothesis 4 was analysed. As expected, the results revealed that the satisfaction level of a member of Generation Y did significantly differ to that of a Generation X member, when having received a performance assessment as part of a regular procedure - namely that the satisfaction level of a respondent belonging to Generation Y increased more strongly when an assessment took place, as for a respondent of Generation X. This fits to the belief that is often expressed in popular and practitioner research that the millennial generation is craving for immediate and frequent feedback and has a higher need for appreciation that goes beyond the scope of salary and monetary awards (Beekman, 201; Moritz, 2014). Also, the Corporate Leadership Council (2005) reports that a strong need for frequent praise and recognition has been identified for this generation and a study by Universum (2014, p. 71-72) found that 50% of European Millennials found feedback to be very important with also 50% stating they wish to receive feedback once a week. Further, academic literature has found that the youngest generation in the workforce highly values fast advancement and development opportunities (more than their predecessors) and is willing to proceed in their careers with quick speed (Terjesen, Vinnicombe, and Freeman, 2007; Ng, Schweitzer, and Lyons, 2010). These findings support the assumed desire for a strong feedback culture of Generation Y and receiving performance assessments, to understand their strengths and weaknesses and being able to develop themselves more quickly, therefore matching to the results of H4. But, looking at the regression results two things have to be considered: first-

ly, that the performance assessment as a moderator of Generation Y's satisfaction level, has not been as significantly strong as comparably the effect of age on the satisfaction level (with a decrease in satisfaction when respondents get older) and secondly, that the height of income between the two generations differed significantly (see 3.4) with Generation X members having on average an approximately 643€ higher monthly net income than Generation Y members. Both factors are most likely caused by the cross-sectional setup for H4 as respondents of Generation X were older than respondents of Generation Y so that the age has had an influence on the satisfaction level as well as the height of the income. Therefore, these results only give an indication in the direction of Generation Y's interest in performance assessment and feedback, but for the future the factor age needs to be taken into account and ideally tested in a time-lag data setup to reveal stronger results concerning Generation Y's interest in feedback and recognition and also when wanting to design performance assessments for different generations. Further the explanatory power of this regression is quite low, also limiting the conclusions that can be made from these findings. Nonetheless, a certain direction of Generation's Y attitude towards performance assessments and feedback can be taken from the results, therefore suggesting this element of incentive schemes to be an important part for the youngest generation and also an interesting topic for further research of generational incentive dynamics at work.

5 Conclusion

5.1 Main findings and theoretical contribution

Within the analysis of this thesis, small to moderate generational differences in satisfaction levels concerning work-related aspects and incentive perceptions between Generation X and Generation Y were found. In detail, the results of this study revealed that Generation Y is more satisfied with their job, less interested in monetary-incentives, more interested in working less hours (taking into account the reduction of salary) and reacts with a stronger increase in satisfaction with the job when receiving a performance assessment compared to the precursory Generation X. With the given results, this thesis contributes to the literature in three main ways. Firstly, as one of the few studies on generational differences, it uses time-lag data from a representative national survey of the German workforce to reveal

generational differences (Deal, Altman, and Rogelberg, 2010). This data set grants the opportunity to compare the satisfaction levels and preferences of the two generations tested at the same ages at different points in time, so that the confound between generation and age can be avoided. Secondly, as one of the first (e.g. Rawlins, Indvik, and Johnson, 2008), it investigates the differences in incentive preferences among generations giving empirical evidence that these differ between Generation X and Y. Thirdly, this study reacts to the need of broadening generational research with respect to national cultures and different geographical regions, as it investigates different generations in Germany with time-lag data, which has so far only been done by Breithsohl and Ruhle (2012).

5.2 Managerial implication

The findings within this thesis give some indications on how they can be used in praxis for designing incentive schemes. Firstly, taking together the research results for research question one and two, the finding that Generation Y is more satisfied with their income, less satisfied through the receipt of monetary incentives and more willing to reduce their working hours gives a hint on how practitioners could restructure their incentive schemes for the youngest generation in the workforce. As said, the results indicate that Generation Y has a stronger desire for work life-balance and more leisure time and a decreased desire for extrinsic rewards like money, so that the use of 'time' instead of money (e.g. bonuses or stock options) as an incentive method can be promising when designing schemes for Millennials. One direction for companies could be to consider opportunities for work-life balance on-site like swimming, spas or doctors so that the younger employees can use their time off work more effectively (Ng, Schweitzer, and Lyons, 2010). Another direction is to include work-life balance options off-site like working remotely or from home or granting additional vacation days as a bonus to an incentive scheme (Kuhl, 2014; Moritz, 2014). But, the results also suggest that when designing schemes for different generations, two other factors need to be taken into account: gender and type of employment. Firstly, as already mentioned in 4.4, gender had a strong significant effect in all three regressions for research questions one and two and also made a difference for stipulated working hours and desired working hours. For practitioners, this implies that an incentive scheme including 'time' needs to be carefully designed to fulfil the needs of both genders of Generation

Y. Secondly, the strong significant influence of part-time employment on desired working hours in a positive direction (see 4.1.3) assumes that the use of 'time' as a direct incentive (e.g. additional days off instead of monetary bonuses) should only be used for Generation Y full-time employees. Other work-life balance options on-site as stated above could still be interesting for all type of employment contracts.

Secondly, when looking at the results of research question 3, feedback and appraisal can also play an important role when designing a holistic incentive scheme for Millennials. The results suggest that the youngest generation in the workforce highly values a strong feedback culture so that it can be valuable for practitioners to start thinking about including more frequent feedback and performance assessments in the regular day-to-day business. But, as stated in 4.4 these results still need to be verified at best with the use of time-lag data, meaning that practitioners should use this implication only as a first direction and test it further within the given circumstances of the company routine. Nevertheless, the results of this thesis do give a first direction of what kind of restructurings of incentive schemes for German Millennials can be valuable for future considerations.

5.3 Limitation

There are a few primary limitations of this study. Firstly, the clustering of the two generations has been based on exact ranges of years and mostly on the basis of the American generational definition, even though it can be problematic to exactly find the point in time to separate one generation from another or also to assume that all members of one generation experience the same sociocultural and socioeconomic events in their lives across countries – especially because countries differ in their histories and therefore in the development of their people (D'amato and Herzfeldt, 2008). In this thesis, the analysis is based on generational members of one country, namely Germany, therefore decreasing this limitation (Macky, Gardner, and Forsyth, 2008, p. 859). Also, this limitation can be weakened as Bruch, Kunze, and Böhm (2010) found that the birth years and the description of especially the two generations covered in this thesis (Generation X and Y) are clustered in the same time periods and are based on similar characteristics as done in the American literature on which many of the assumptions of this thesis have been based. Other researchers use a

clustering approach of sub-generations to overcome this problem and to test if there is variance within the generational definitions (D'amato and Herzfeldt, 2008; Kowske, Rasch, and Wiley, 2010). This sub-clustering has not been used in this thesis, as the generation samples had to be reduced by some years to a slightly smaller sample size therefore and not covering the complete generations per definition (see 3.4).

Secondly, the effect sizes can be classified as small (ranging from $R^2 = 0.01$ for H4, $R^2 = 0.086$ for H3, $R^2 = 0.093$ for H1b to $R^2 = 0.102$ for H2) (Cohen, 1992), limiting the power of the statistical analysis and implications. But, for the intention of this thesis the low r-squared is acceptable, as it is not intended to find predictors for e.g. satisfaction levels, but rather to find a relation between generation and satisfaction as well as generation and incentive-related work issues. The latter is shown through the significant results of four of five hypotheses, so that the implications through these results do grant a benefit for practitioners and further research. Additionally, it can be said, that through the low effect sizes, generation is only a predictor for e.g. satisfaction to a small extent, as satisfaction is a complex construct, which may be influenced by many other variables (e.g. the person itself and the socioeconomic environment). Therefore, as also found in other generational studies, the small effect sizes suggest that while generation is a relevant predictor for some work-related issues, other factors may also play an important role (e.g., Cennamo and Gardner, 2008).

Thirdly, some criticism can be found with using the German SOEP for the intention of analyzing incentive perceptions, as the data set covers a wide range of socio-economic questions and not specific question sets concerning incentives. Also, the use of single-item measures compared to multiple-item measures for the satisfaction questions of the SOEP can be criticized as it is often discussed if they are valid for satisfaction and also for generational research (Cheung and Lucas, 2014; Oshagbemi, 1999; Twenge, 2010). Further, the satisfaction scale of 1-10 could be biased as respondents might not be able to distinguish between the donations of the satisfaction levels of i.e. 7 or 8. For further research a sub-classification in 'satisfied' (above median satisfaction level) und 'unsatisfied' (below median satisfaction level) could be added (median sample split). But, due to the many other

advantages of the SOEP dataset (see 3.2), like in the study of Breitsohl and Ruhle (2012), this dataset was still chosen for the purpose of research of this thesis.

Fourthly, some socio-economic factors like educational level and family status (e.g., having children) were not taken into account as they were not provided within the given data, but could affect the regression results. The family status could especially have an impact on the testing of H3, as it could be assumed that respondents with children would be more willing to reduce their hours compared to respondents without children. But this influence can be seen as less critical, as other studies have found out that the desire for leisure time has increased with the youngest generation although the background factor of having a family was controlled for (Pyöriä et al., 2017, p. 9). This could be explained by a result of Twenge et al. (2010, p. 1136), who found that younger people's desire for work-life balance and leisure time to travel or spend with their friends started before they had families. Further, the educational level can play a role in incentive preferences as on the one side the type of education might influence the desire for different kind of rewards (e.g., it has been found that people with higher education levels tend to value leisure time more highly and people of lower education showed a higher appreciation of work (Pyöriä et al., 2017, p. 9)) and on the other side also different kinds of jobs most likely include different kind of incentive options (e.g., differences in how performance is measured for blue collar workers vs. white-collar workers (Kauhanen and Napari, 2012)).

Fifthly, for H1-3 time-lag data that was taken from two different time periods was used. Therefore, it was not possible to control for a confound effect between generation- and period-effects (Rhodes, 1893). Even though period-effects are seen to be the weakest compared to age- and generation-effects by some researchers and are therefore the least critical (as behaviors and attitudes are often developed early in life (e.g. childhood and early adolescence, also see 2.1) (Low et al., 2005; Twenge, 2010), it has to be noted that they still could play a role in the analysis of this thesis, that was not taken into account.

5.4 Suggestion for further research

With the results of this thesis, a first insight into incentive related perceptions and attitudes of Generation Y in Germany is given (especially in the direction of what incentive types are preferred by Millennials). Nevertheless, there is a need to broaden this field of research in several directions. Time-lag research that is able to control for age-effects including more in-depth questions on incentive preferences and ideally on existing incentive schemes in real employer contexts should be conducted to gain a deeper understanding of the differences in incentive desires. The focus should lie on finding out how the different generations perceive their current incentive schemes and what exactly they wish for in the future as the given data from the SOEP were only able to slightly touch this area and rather give a broader and not in specific insight. Further, the successors of Generation Y, namely Generation Z, should be included in research as soon as possible, as they will as well start entering the workforce in Germany soon and might as well bring new needs and desires to the workplace. Lastly, with the results of this thesis the geographical scope of generational research was broadened, but still more research outside of the USA (especially in Africa, Asia or with cross-cultural studies) needs to be conducted to create a holistic picture of generational differences across the world (Breitsohl and Ruhle, 2012).

5.5 Summary

Finding work-related generational differences has been a topic of interest for researchers and practitioners for some time (Kupperschmidt, 2000; Rhodes, 1983; Smola and Sutton, 2002). Recently, it has experienced a new upswing with the entrance of the newest workforce member, Generation Y (Breitsohl and Ruhle, 2012; Pyöria, 2017) and an increased interest in finding out how to work with and manage members of different generational cohorts in the workplace (Cennamo and Gardner, 2008). But, conducting generational research of high quality often struggles with methods of data analysis as the interrelation between generation- age and period-effects is hard to detangle. Only studies using time-lag or longitudinal data have a real chance of finding true generational differences (Parry and Urwin, 2011; Rhodes, 1983). Further, country specificity plays an important role in generational research, as so far, only few studies have been conducted outside of the US, therefore limiting the generalisability of results (Breitsohl and Ruhle, 2012; Parry and Urwin,

2011). In addition, one specific field in work-related generational research that has not yet been much explored is that of incentive related generational differences (Ng, Schweitzer, and Lyons, 2010). Therefore, this thesis, bedded in the overall field of work-related generational research, aims at expanding this research area in three ways: firstly, by controlling for age-effects by the use of time-lag data, secondly, by using data from outside the USA, and thirdly, by investigating the thitherto mostly unexplored field of generational differences in incentive perceptions.

Four hypothesis are tested with a statistical analysis of the data from the years 2002, 2015 and 2016 of the German SOEP using a time-lag and cross-sectional set up. The analysis reveals four main results concerning members of Generation Y: firstly, that they are more satisfied with their job, secondly, that they are less interested in monetary incentives, thirdly, that they are more interested in working less hours (taking into account the reduction of salary) and fourthly, that they react with a stronger increase in satisfaction with the job when receiving a performance assessment com-pared to the precursory Generation X. The results give a first insight that it can be valuable for practitioners to start rethinking the design of incentive schemes for Generation Y by for example focussing more on options using ‘time’ as an incentive factor and putting a higher emphasis on a strong feedback culture for Millennials. It is also important to note that based on the results also gender and type of employment need to be considered carefully when designing incentive schemes for different generations. Nevertheless, the need for more generational research outside the US and focussing in more detail on incentive preferences by using data that grants the possibility to control for age- and period-effects is still prominent to gain a deeper understanding and give sophisticated practical advice on how to manage, motivate and develop employees of Generation Y effectively.

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7 Appendix

Table 9: Overview of selected studies on work-related generational differences

Study	Year	Country	Generations	Method	Respondents	Main results
Generational differences in work values, outcomes and person-organisation values fit - Cennamo and Gardner	2008	New Zealand	Baby Boomers, Gen X, Gen Y	Cross-sectional, online-questionnaire (self-reported)	Employees (representing a range of industries)	Gen Y placed more importance on status and freedom work values, Baby Boomers, better person- organization- fit
Are generational differences in work values fact or fiction? Multi-country evidence and implications - Cogin	2012	USA, Australia, China, Singapore, Germany	Traditionalists, Baby Boomers, Gen X, Gen Y	Cross-sectional, questionnaire (self-reported)	Employees from large multinational companies	Most important work value for Traditionalists and Baby Boomers was 'hard work', for Generation X was 'asceticism' and for Generation Y was 'leisure'
The employment expectations of different age cohorts: Is generation Y really that different? – Treuren and Anderson	2010	Australia	Baby Boomers, Gen X, Gen Y	Cross-sectional, online survey	University students	No fundamental difference in future employment conditions expectations between Gen Y and Gen X and Baby Boomers
Learning orientation, organizational commitment and talent retention across generations – D'amato and Herzfeldt	2008	Europe	Early Boomers, Late Boomers, Early Gen X, Late Gen	Cross-sectional, online survey	Managers	Younger generations (early and late Gen X) are less willing to remain in the same organization and have lower organizational commitment, Gen X shows stronger learning orientation
New Generation, Great Expectations: A Field Study of the Millennial Generation – Ng, Schweitzer, and Lyons	2010	Canada	Generation Y	Cross-sectional, national survey	Undergraduate students	Gen Y placed highest importance on individualistic aspects of a job, had realistic expectations of first job and salary, seek fast advancement development opportunities, wish for work-life balance

Total rewards that retain: A study of demographic preferences – Pregnolato, Bussin, and Schlechter	2017	South Africa	Baby Boomers, Gen X, Gen Y	Cross-sectional, 3 questionnaires	Managers	All generations considered financial rewards as the most important component of their reward package; work–life balance relatively more important for Gen Y than career advancement
Attracting Generation Y graduates: Organisational attributes, likelihood to apply and sex differences – Terjesen. Vinnicombe, and Freeman	2007	United Kingdom	Gen Y	Cross-sectional, interviews and survey	Undergraduate students	Most important to Gen Y: training and development, career opportunities, variety in daily work, dynamic business approach
Generational preferences for work environment fit: effects on employee outcomes – Westerman and Yamamura	2006	USA	Baby Boomers and Gen X and Y combined	Cross-sectional, survey	Accountants	Higher importance of goal orientation and system work environment fit for younger generations; Baby Boomers experienced higher levels of overall satisfaction than Gen X and Y
Generational differences in personality and motivation – Wong, Gardiner, Lang, and Coulon,	2008	Australia	Baby Boomers, Gen X and Gen Y	Cross-sectional, two questionnaires,	Employees	Results not supportive of the generational stereotypes in management literature and media; few meaningful differences found between the three generations; differences more related to age than generation
Millennials' (Lack of) Attitude Problem: An Empirical Examination of Generational Effects on Work Attitudes – Kowske, Rasch, and Wiley	2010	USA	Baby Boomers, Gen X and Gen Y	Time-lag, repeated employee opinion survey	Employees	Millennials reported higher levels of overall company and job satisfaction, satisfaction with job security, recognition, and career development and advancement, and similar levels of satisfaction with pay and benefits and the work itself, and turnover intentions
Generational Differences in Work Values: Leisure and Extrinsic Values	2010	USA	Baby Boomers, Gen X and	Time-lag, three surveys	High School seniors	Leisure values increased over generations, work centrality declined; Extrinsic values (e.g., status, money) peaked with Gen

Increasing, Social and Intrinsic Values Decreasing – Twenge, Campbell, Hofman, and Lance			Gen Y			X but still higher among Gen Y than among Boomers; Social values and intrinsic values rated lower by Gen Y than by Boomers
The Millennial Generation: A New Breed of Labour? – Pyöriä, Ojala, Saari, and Järvinen	2017	Finland	Gen X and Gen Y	Time-lag, survey	Employees (national representative survey)	Value given to work has remained consistently high; leisure and family life have gained increasing importance among millennials, no support that Gen Y is less work-oriented
Generational differences: revisiting generational work values for the new millennium – Smola and Sutton	2002	USA	Baby Boomers and Gen X	Time-lag, two surveys	Employees	Results suggest that generational work values differ; increased desire to balance work and personal goals
Differences in work-related attitudes between Millennials and Generation X: evidence from Germany – Breitsohl and Ruhle	2012	Germany	Gen X and Gen Y	Time-lag, survey	Employees (national representative survey)	Gen Y more satisfied with income than Gen X, and more positive outlook on future life satisfaction; no differences in job satisfaction, lei-sure time satisfactions, current life satisfaction and economic and job insecurity

Source: Author's summary of studies, references given in table